



WORKFORCE RETENTION AND RECRUITING

Fort Wayne District

December 2023

Visit the
ITT website





WORKFORCE RETENTION AND RECRUITING

Defining the Problem

o Indiana Transportation Industry

- o INDOT
 - o 3,600 INDOT employees
- o Indiana Constructors, Inc. (ICI)
 - o 83,000 contractor employees
- o American Council of Engineering Companies (ACEC)
 - o 4,500 consultant employees

91,000 out of
3,100,000 in Indiana
3 % of labor force

Matthew Nance, director of the Indiana Construction Roundtable Foundation, said in a June 2023 interview, "Our best projection is that Indiana will need 275,000 construction workers by the year 2026." To accomplish this, an additional workforce of 110,000 needs to be found, trained, and added to the current 165,000 individuals in the overall construction industry. Transportation construction is a sizable portion of this number.

Berggoetz, Barb. "Construction industry educates K-12 students about building trades in effort to close job gap." Indianapolis Business Journal 02 Jun 2023. <<https://www.ijb.com/articles/starting-young-2>>.

In July 2023, a survey gathered feedback on how to improve retention and recruit new employees to the Indiana transportation construction industry.

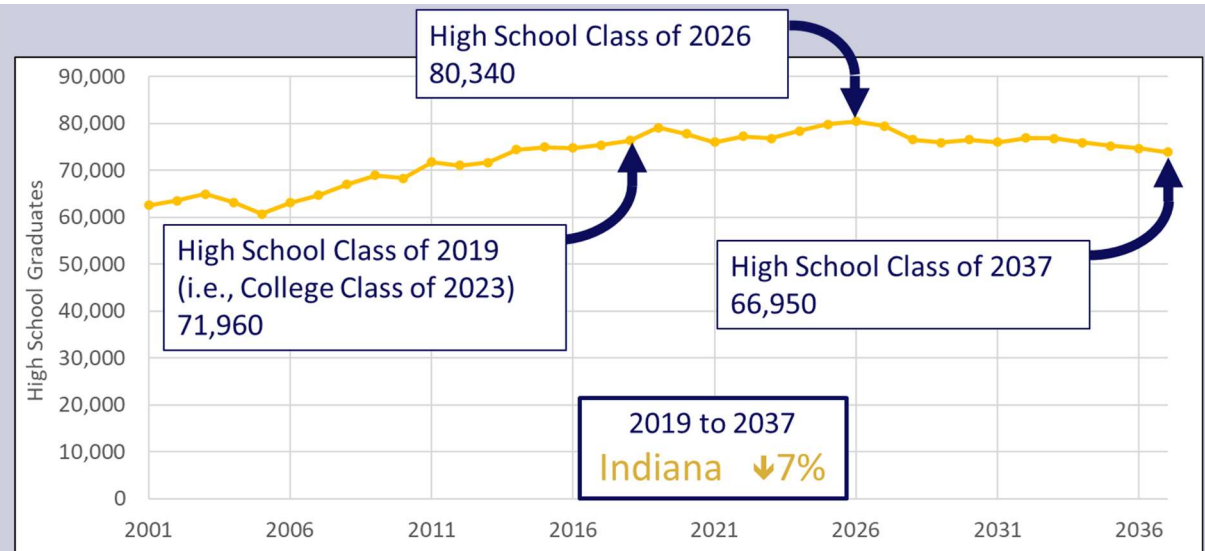
The full paper of survey results and analysis can be found at the ITT website.



The easy way to increase your workforce is to hire more people. But what do you do if there are no more people?

The demographics for Indiana show that population growth is plateauing. In fact, when we compare the 2023 college graduating class (high school class of 2019) with this year's new group of kindergarteners (high school class of 2037), Indiana is projected to see a decrease of 7% in the available work force.

Bransberger, Peace, Colleen Falkenstern, and Patrick Lane. Knocking at the College Door: Projections of High School Graduates, 10th Edition. Western Interstate Commission for Higher Education, Dec 2020. <<https://knocking.wiche.edu/>>.

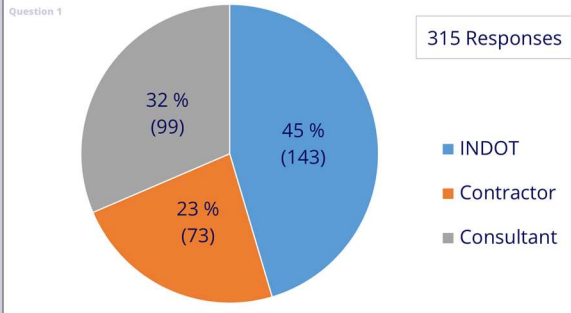




WORKFORCE RETENTION AND RECRUITING

Addressing INDOT Employees Concerns

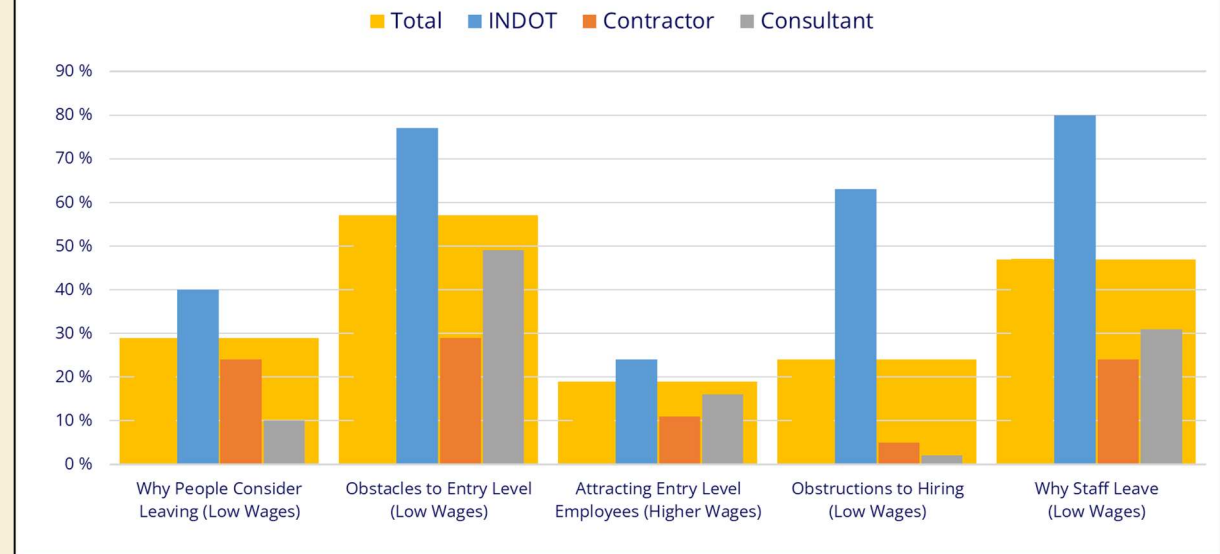
WHO DO YOU REPRESENT?



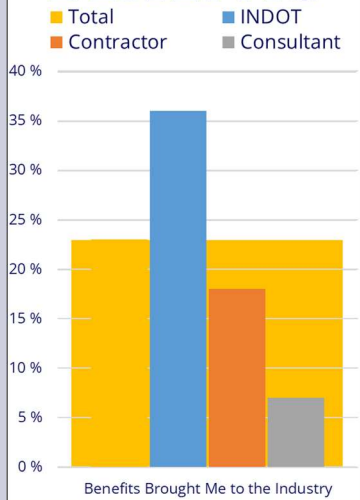
INDOT was the largest percentage of the respondents from the survey.

Regardless of how the questions were worded, wages is the obvious element that restricts recruiting and retention for INDOT. As one anonymous INDOT response succinctly stated, "I don't make enough money."

IMPORTANCE OF WAGES



BENEFITS



When asked what brought you to the industry, while wages were a detriment, benefits were cited as a good reason to join INDOT.

What can INDOT do to emphasize the positive aspects of the entire compensation package of wages, benefits, holidays, etc.?

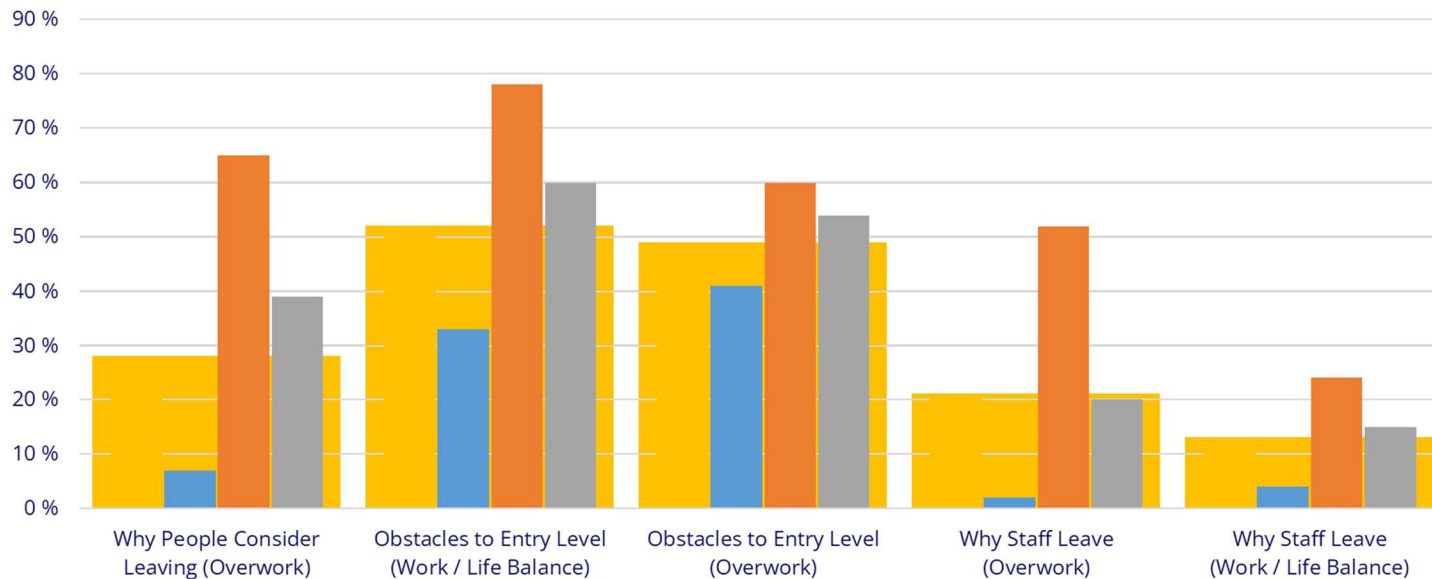


WORKFORCE RETENTION AND RECRUITING

Encouraging Contractor Growth

WORK/LIFE BALANCE

■ Total ■ INDOT ■ Contractor ■ Consultant



“I think to attract the younger generation we need to have a pathway for them to follow to get to the level they desire. We need the completion dates to be more realistic so that we can give employees a better work/life balance. Also need to give employees the ability to take time off during the busy season to enjoy their family. These three things are the beginning of helping to attract the next generation.” - Lynn Bauer, Milestone Contractors

“Lost a few people due to work from home. How do you work from home with a construction company!?” – Anonymous Contractor

Given that many contractors mentioned a lack of work / life balance, long hours, and stress, how can contractors improve this aspect?



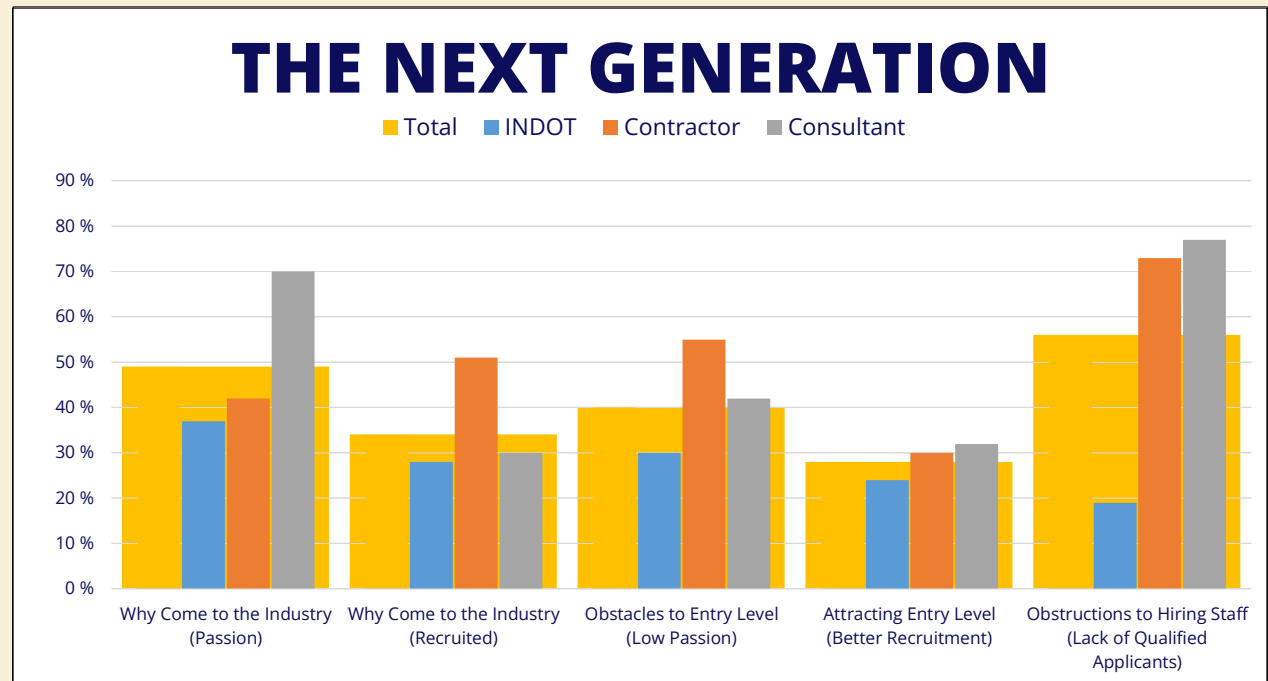
WORKFORCE RETENTION AND RECRUITING

Promoting Consultant Passion

Our industry needs to engage students in college, high school, and even earlier. STEM (science, technology, engineering, and math) is a major focus in education, and we need to include the transportation construction industry specifically. We need to market and mentor these programs to encourage interest in the transportation construction industry. In fact, our “three-legged ITT stool”, in relation to this topic, may need to be a “four-legged chair” with educators a part of the solution.

“For engineers, engage people earlier than when they are making their decision about a career. This usually happens when they are picking college, so make civil engineering and transportation and infrastructure important to them. Tell the story about building things. About how their work can help make their community a better place to live. This sounds like a PR campaign, so maybe that is needed in Indiana schools and communities.” – Anonymous Consultant

“We can't rely on traditional methods, i.e., word of mouth. We have to effectively tell our story to high school kids.” – Anonymous Contractor



Programs do exist to encourage and mentor students. Future City, bridge building competitions, Construction, vocational construction programs such as at Garrett High School and Arcadia's Hamilton Heights High School. But many of these programs are not widely known, even by those in the industry.

Would you recommend your own children enter this industry? How can we encourage the younger generation to enter the profession?



Workforce Retention and Recruiting

Fort Wayne District, 2023

Ask a contractor or consultant, “How’s business?” You are going to hear, “Keeping busy.”

Yes, you would hear the same answer when workloads are light, as the industry is afraid to show “weakness” to their peers. But one glance at our roadways over the summer shows wide ranging construction projects. And during the winter, designers’ parking lots remain full late into the night.

Indiana’s transportation construction industry is thriving, with INDOT’s FY 2022 budget of over \$3 billion alone. ⁽⁵⁾

A thriving business is a good thing, right? Increased workload, increased revenues, and increased profit. However, though recent increases in the industry have been exciting to see, increased staffing has not similarly happened.

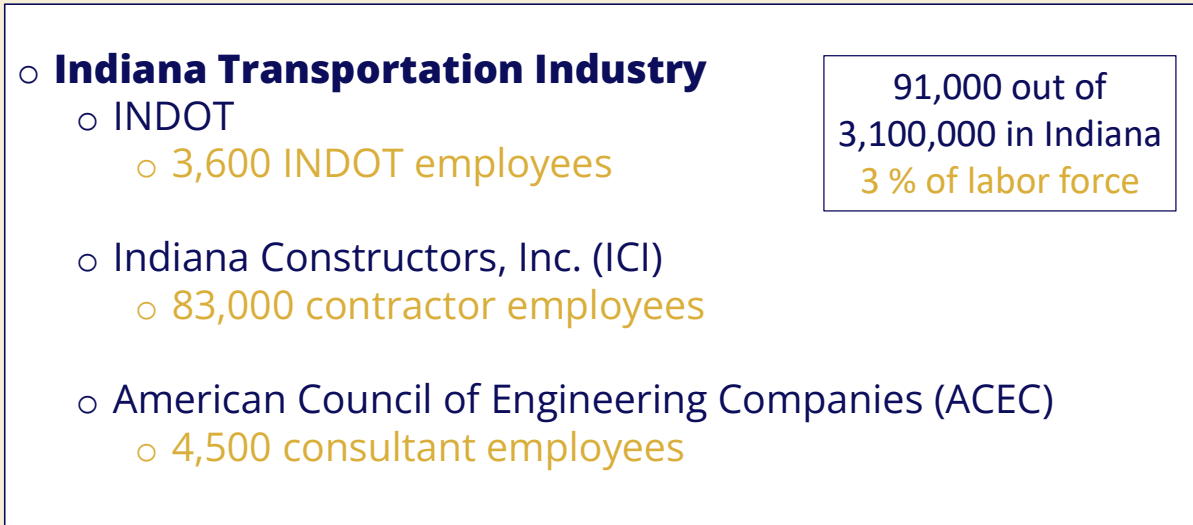
The Industry

Looking at the larger construction picture, Matthew Nance, director of the Indiana Construction Roundtable Foundation, said in a June 2023 interview, “Our best projection is that Indiana will need 275,000 construction workers by the year 2026.” To accomplish this, an additional workforce of 110,000 needs to be found, trained, and added to the current 165,000 individuals in the overall construction industry. ⁽²⁾

The transportation construction industry in Indiana consists of about 91,000 workers, covering INDOT, contractors, and consultants. Contractors encompass the largest portion of this workforce.



Figure 1. Indiana Transportation Construction Industry Workforce. ^{(6) (1) (7)}

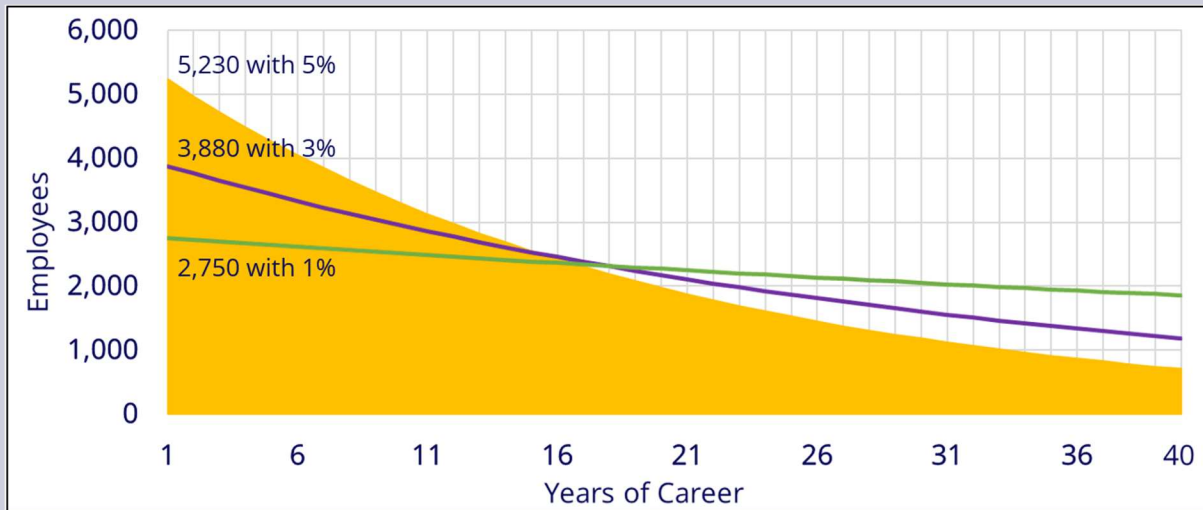


Within the industry, there will be attrition of the workforce each year. At a minimum, mortality and retirement are unavoidable. But there is also some loss of staffing as employees move out of the region or leave the industry for different careers.

In Figure 2, the yellow area of the graph represents the 91,000 employees of the work force distributed over a 40-year career. Assuming a certain percentage of employees exit the industry each year, some number of new employees must enter the labor pool annually to maintain the desired staffing level.



Figure 2. Workforce Distribution and Attrition.

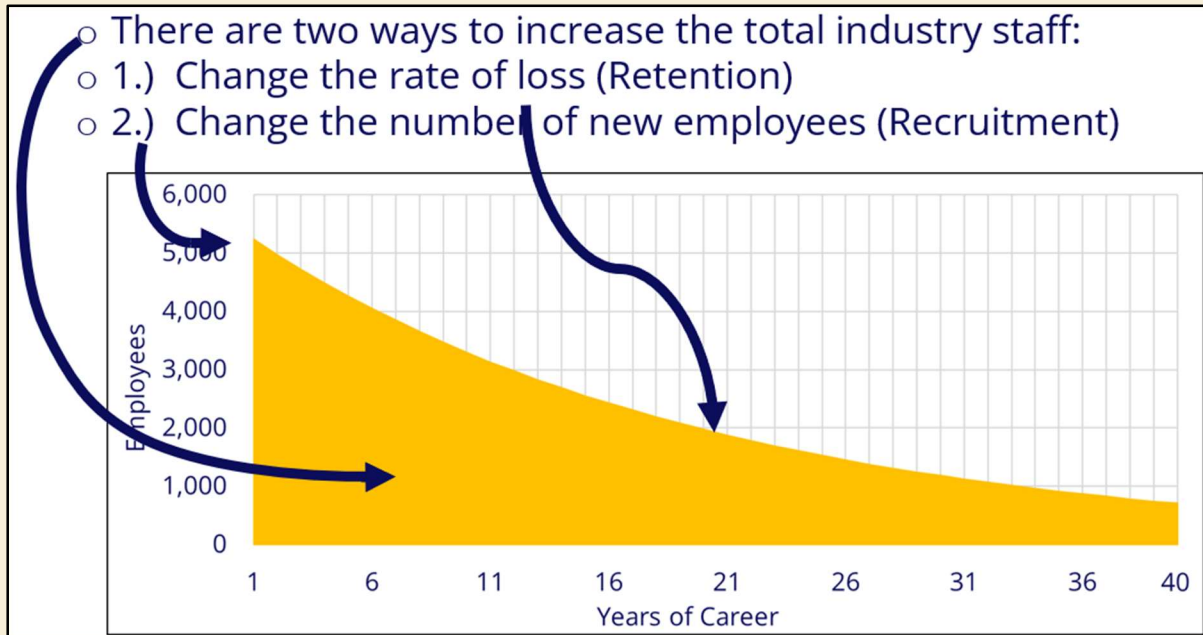


The actual attrition rate is not known, but a lower boundary can be estimated by assuming that each year, 1 out of 40 employees is going to reach retirement age. That gives a minimum attrition rate of 2.5%, which does not consider other reasons for leaving the workforce. A 3 to 5% rate may not be unreasonable to assume.

This means that each year, about 5,000 people need to enter the industry just to maintain the current work levels. The question is: Is the current workforce large enough? According to a 2021 article in *Inside Indiana Business*, Indiana Construction Roundtable Foundation estimated that a workforce of 150,000 is needed by 2026. ⁽⁴⁾

There are two ways to increase the number of laborers in the industry workforce: Lower the rate that individuals leave the workforce (retention) or increase the number of individuals entering the workforce (recruitment).

Figure 3. Increasing the Workforce.



Defining the Problem

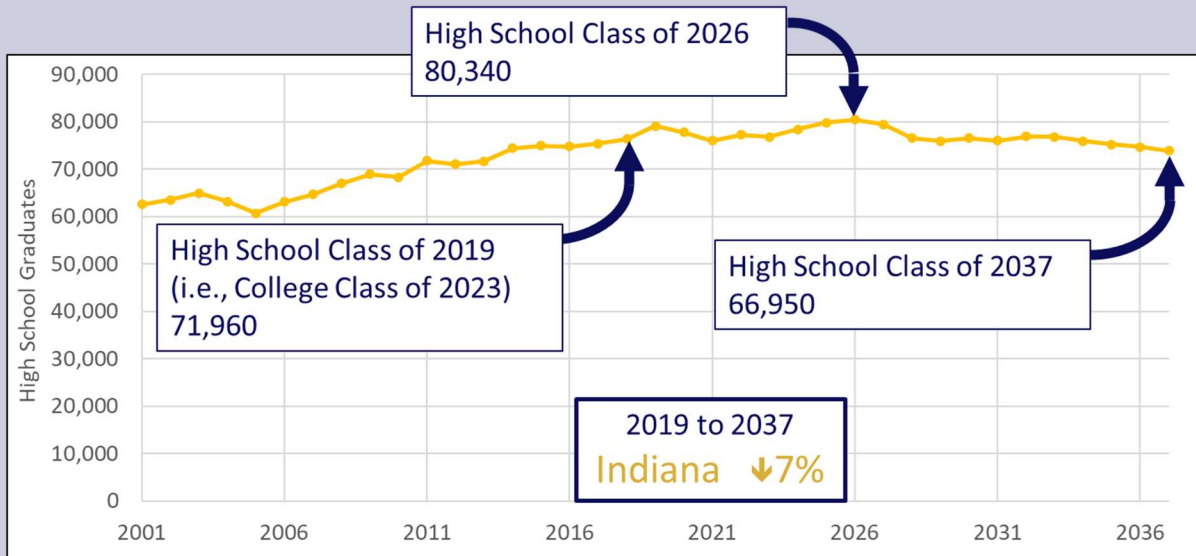
This should be an easy problem to solve. Just hire more people!

But what do you do if there are no more people?

The demographics for Indiana show that population growth is plateauing. In fact, when we compare the 2023 college graduating class (high school class of 2019) with this year's new group of kindergarteners (high school class of 2037), Indiana is projected to see a decrease of 7% in the available work force. ⁽³⁾



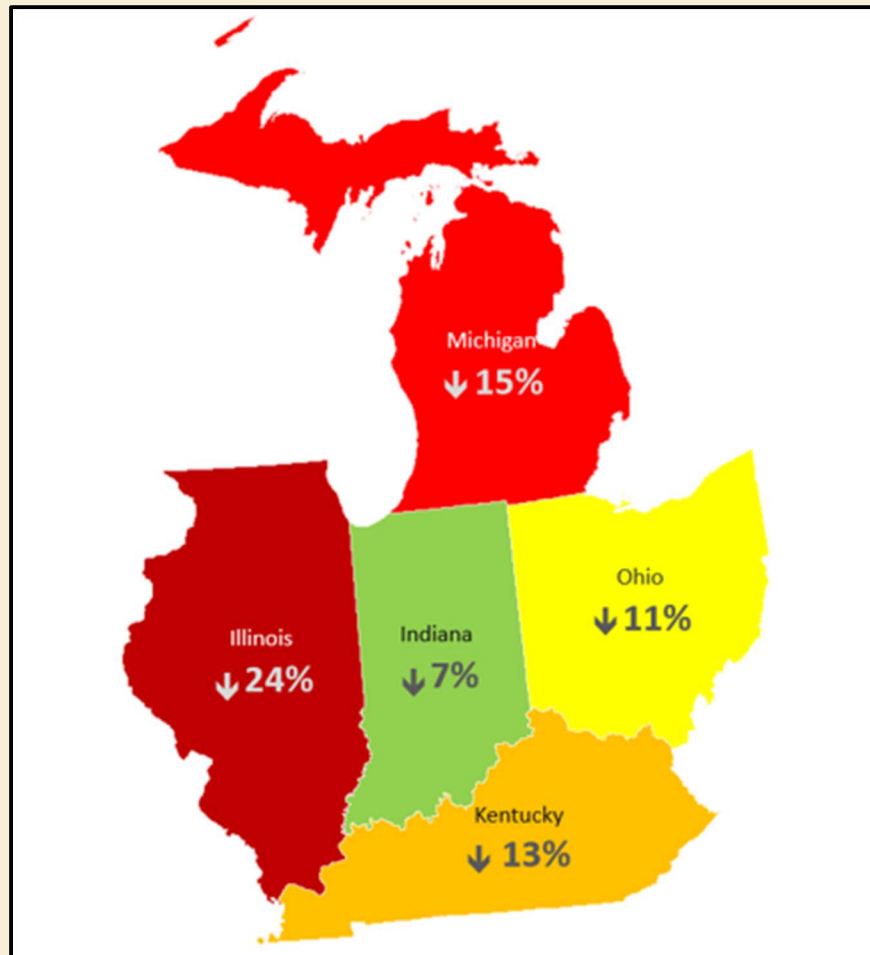
Figure 4. High School Graduates. ⁽³⁾



With fewer potential employees to recruit from, the competition for talented graduates is only going to increase. We will be competing with manufacturers, medical professions, the service sector, restaurants, the tech sector You begin to see the issue of this decreasing resource?

To worsen this potential staffing shortage, neighboring states have a much worse drop in future graduates. So, not only is our industry competing with other industries in Indiana, but we are also competing with our neighboring states for our workforce resources.

Figure 5. Neighboring States High School Graduation Changes. ⁽³⁾



Survey

This is a significant issue, and the workforce retention subcommittee understood that the solutions to this problem involved policy decisions substantially above our ability to implement. However, we realized that we had a large resource available to us that could provide some insights into what our industry needed to examine to bring and keep people in our industry.



If we are asking ourselves what our industry needs to do to bring in talent and keep it, the best people to provide input are those who brought in their talent and are keeping it here – our colleagues.

In July 2023, we developed a survey for the Indiana Transportation Team to gather some insight into what brought people into the industry, and why they stay. We understand that this survey is not scientific and consists of self-selecting participants. However, we also realize that these are the individuals who are most passionate about their current place in the industry.

Demographics

Figure 6. Question 1. Who do you represent?

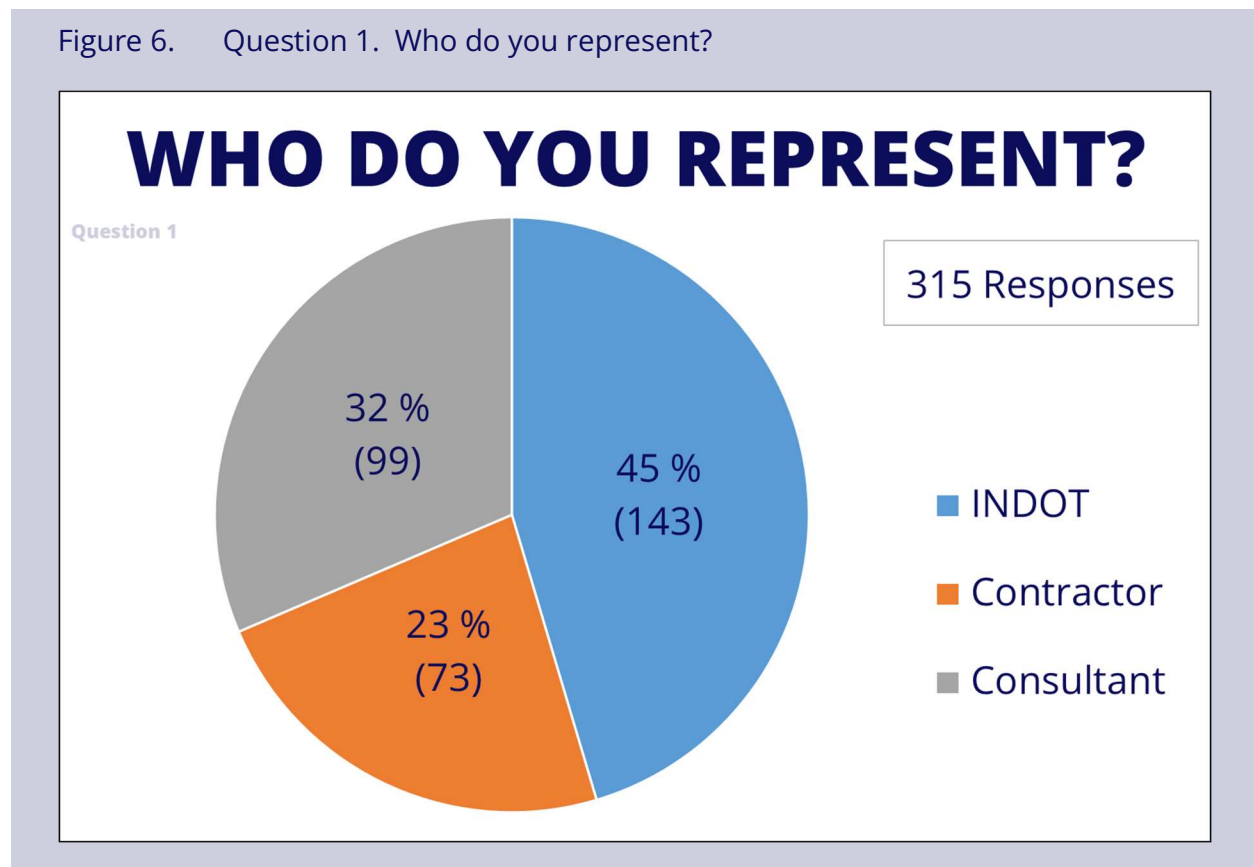


Figure 7. Question 2. How many years of experience in this industry do you have?

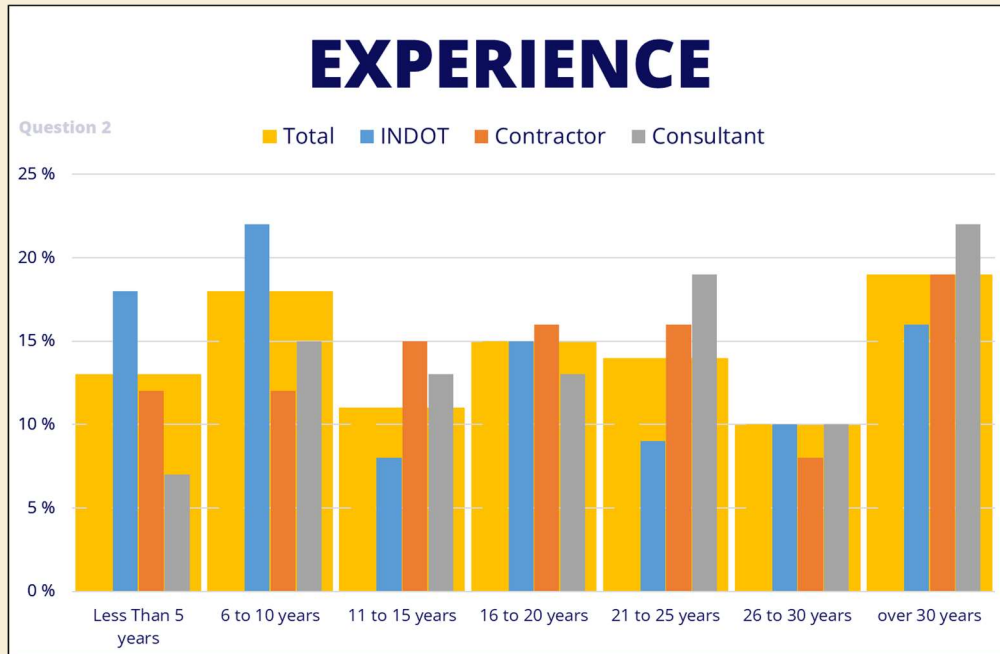


Figure 8. Question 3. How long until your planned retirement?

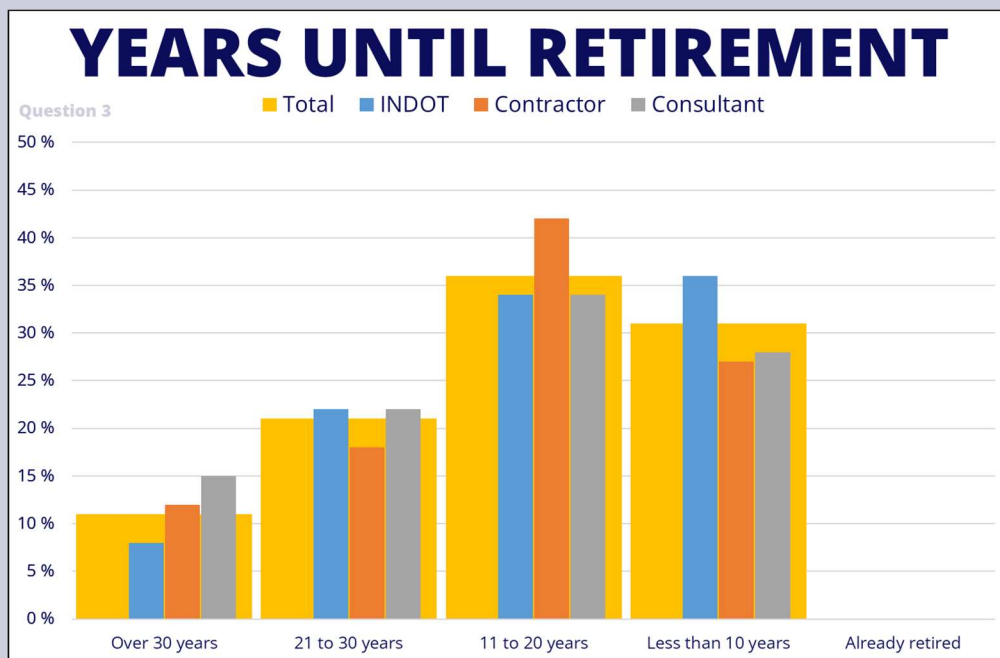
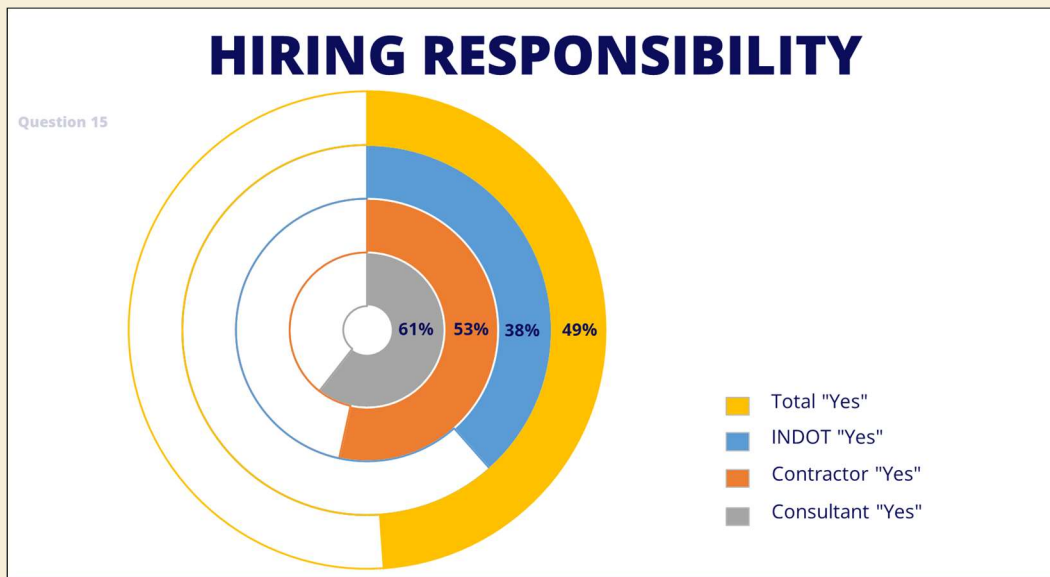


Figure 9. Question 15. In your current position, do you have a responsibility for hiring new or processing quitting staff?



The respondents were well distributed among the three constituencies of the Indiana Transportation Team. Fewer contractors responded that would have been preferable given their larger percentage of the industry. However, we expected that the survey invitation and subsequent responses would not have been shared as much with contractors' field staff.

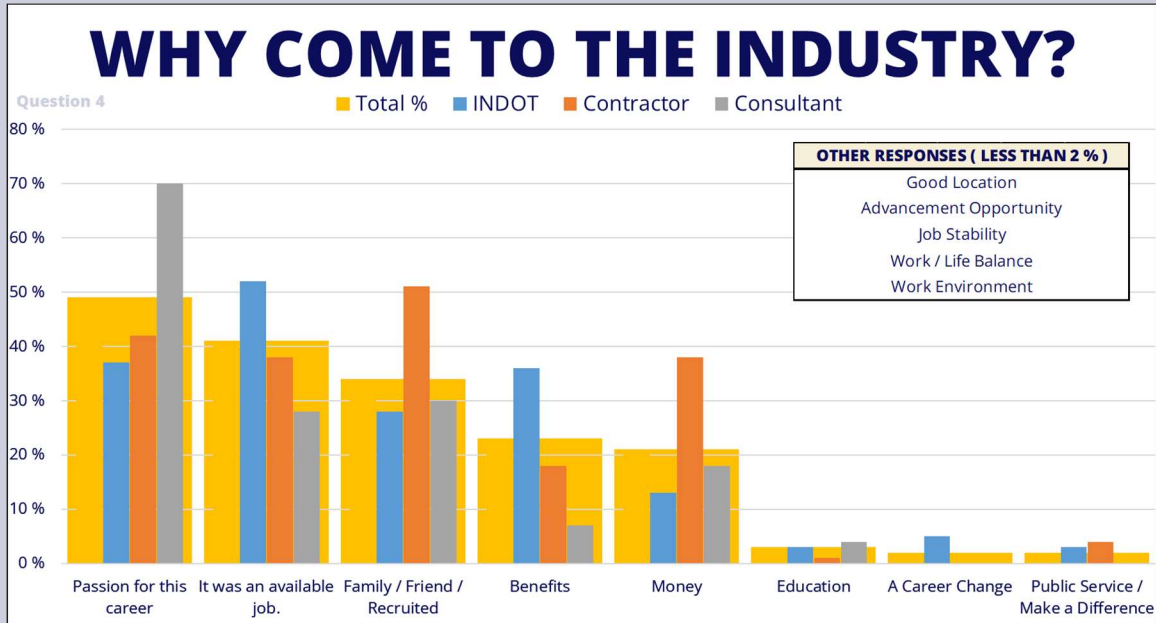
There was also a reasonable distribution of the respondents based on their experience. A larger weighting of less experienced employees would be expected, when considering a distribution similar to Figure 3. But again, we expected that the ITT survey would have been originally shared with higher level employees, and fewer entry level employees would have been invited. This is suggested by the response to question 15. INDOT made a very deliberate effort to encourage responses, which is evident in the responses from Questions 1 and 2.

An interesting discrepancy is noted between Questions 2 and 3. While there is an even distribution in experience in the industry, the time remaining until retirement is a little sooner than expected. This could be caused by employees planning to retire from the industry sooner than a full 40-year career. Or older individuals are entering into the industry as a second or later career. These individuals would show a lower level of experience in the industry but would respond with sooner retirement.



Contentment

Figure 10. Question 4. What brought you into the transportation construction industry? (Select as many that apply.)



“Good roads are essential to our society. I like having a career that makes a difference.”
– Anonymous Contractor

“I was interested in public service overall.” – Anonymous INDOT

“Satisfaction in making our transportation system better.” – C. William Read II, PE, INDOT

“Received a job offer during HS from an ICI member. The president of Weddle Bros. offered me and 4 friends laborers' jobs. All five of us took the jobs. 2 of us are still in the horizontal construction industry today.” – Eric Fisher, Indiana Constructors

“A civil engineering and architecture class in high school.” – Jacob Barkey, Beam, Longest and Neff, LLC

“Retired truck driver. I want to help keep the roads safe for the commercial drivers and the public.” – Anonymous INDOT

Figure 11. Question 5. Is what brought you here from the above question still relevant to keeping you here?

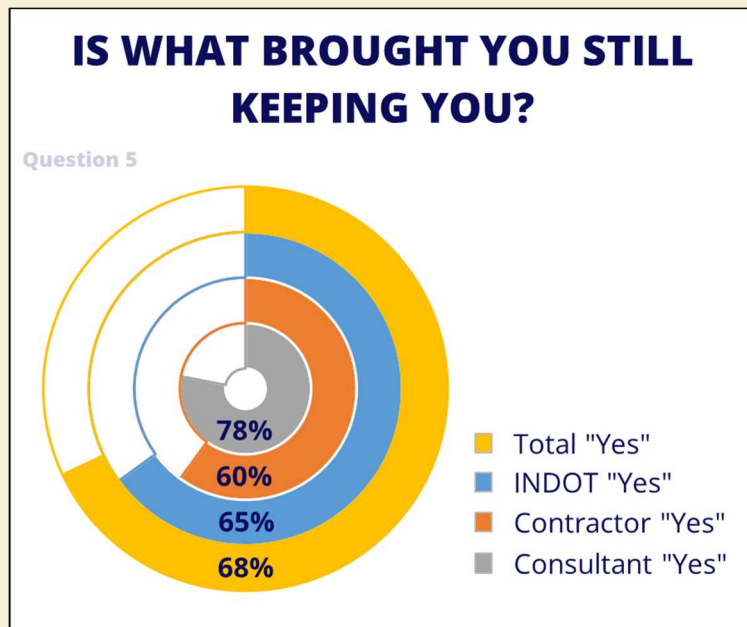
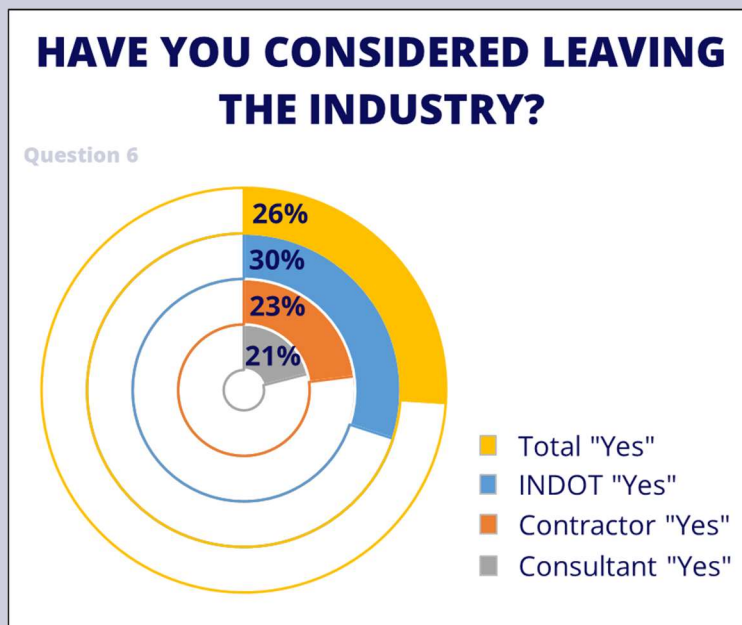


Figure 12. Question 6. Have you recently given serious consideration on leaving the industry?



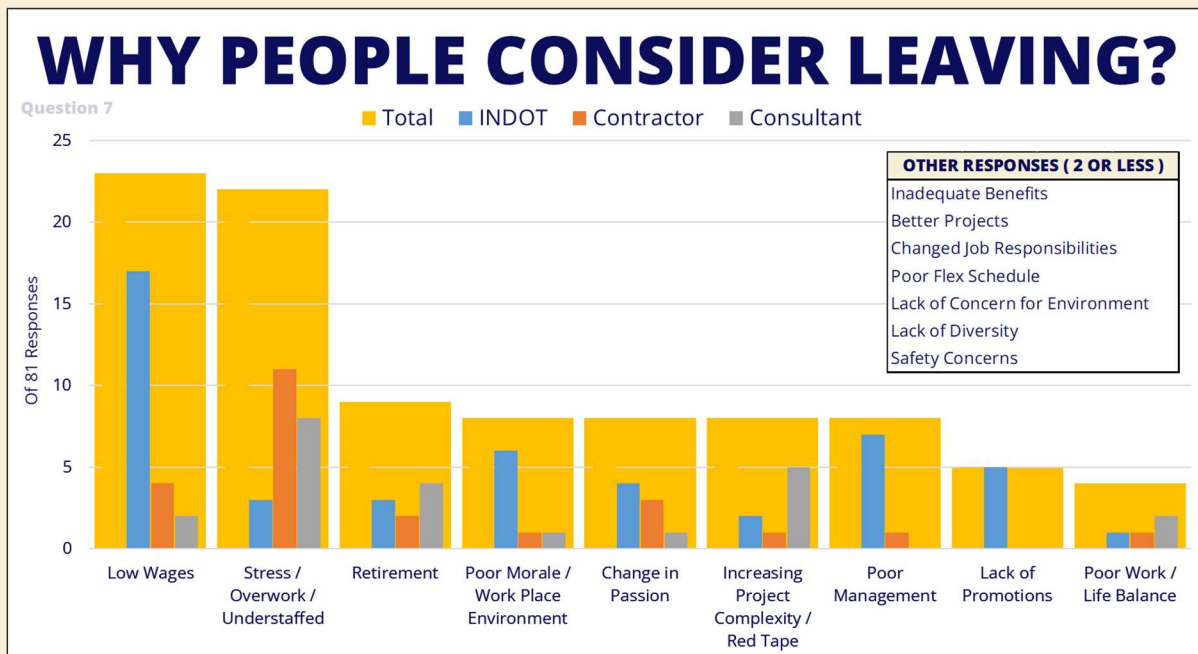


Five highly rated reasons were selected for why people entered this industry. Consultants seemed to have a passion for engineering. INDOT staff thought it was an available job with good benefits. And contractors were recruited with good wages.

About two thirds of respondents felt that these reasons were still valid in keeping them working in the industry. But, for a quarter, something has changed, which could be the initial spark in leaving.

A surprising observation is that between questions 5 and 6, either what brought you is keeping you or you're considering leaving. That is, there are only a few people who say that what brought them is no longer valid, but they are staying anyway. Once that initial reason is not being fulfilled, it seems that an exit is likely.

Figure 13. Question 7. Why did you consider leaving the industry?



“I was tired of the long hours, I looked at other industries and could make same or better compensation.” – Anonymous Consultant

“More prestigious title, better benefits, more flexibility, more income.” – Anonymous INDOT

“We are overworked, there are not enough people to do every task at hand.” – Anonymous Contractor



“Possibility for higher wages, lower hours, and less stress in other fields.” – Anonymous Consultant

“Over worked and understaffed and pay has not reflected the understaffing. Need to do just as much to retain the good employees.” – Anonymous Contractor

“I don't make enough money.” – Anonymous INDOT

“Feeling like I'm unable to make meaningful positive impact. Feels like the people in charge want to tout change/improvement, but don't allow for anything meaningful to happen.” – Anonymous INDOT

“There's no enjoyment left. No one wants to work together anymore to come to a resolution on problems.” – Anonymous Contractor

“There is no personal growth or monetary gains to doing a good job. Economy is changing faster that what INDOT is, and it substantially affects families and the employees' decision to stay with the employment. I can't just go to my boss and ask for a raise or extra work for gains.” – Anonymous INDOT

Question 7 was asked only of those people who stated they had considered leaving the industry. The general answers were typical of those you would expect. However, there were clear differences between the three groups of the ITT.

INDOT strongly cited low wages as a primary driver for considering leaving. Poor management and a poor workplace environment were also strongly evident for INDOT.

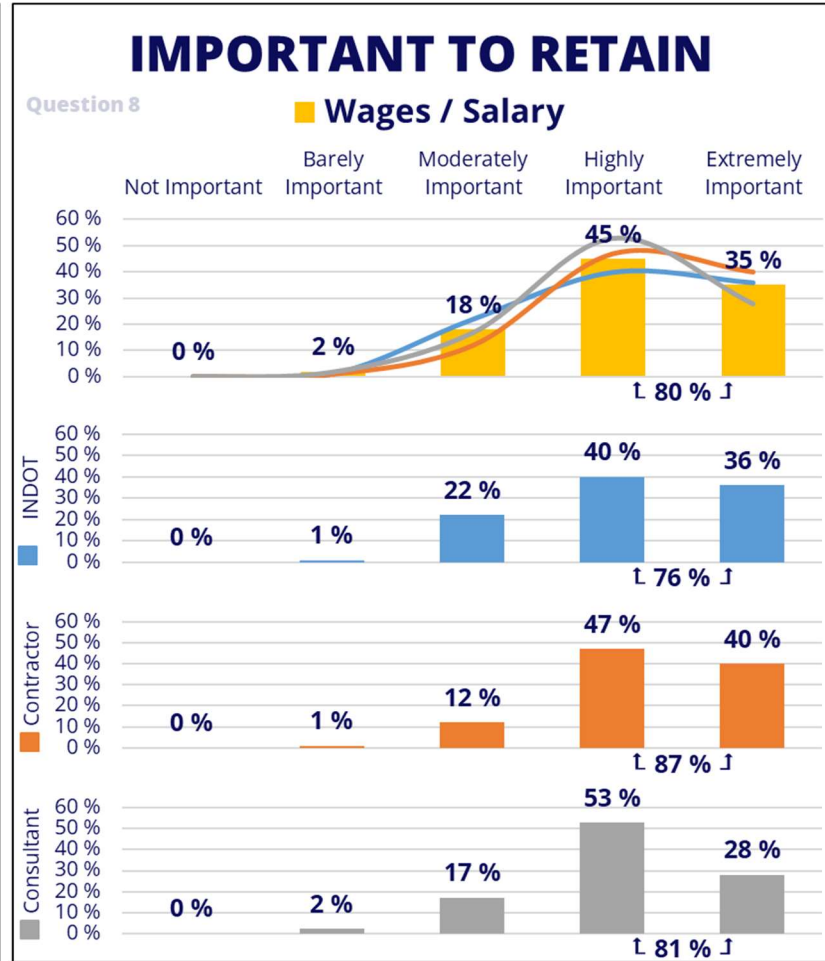
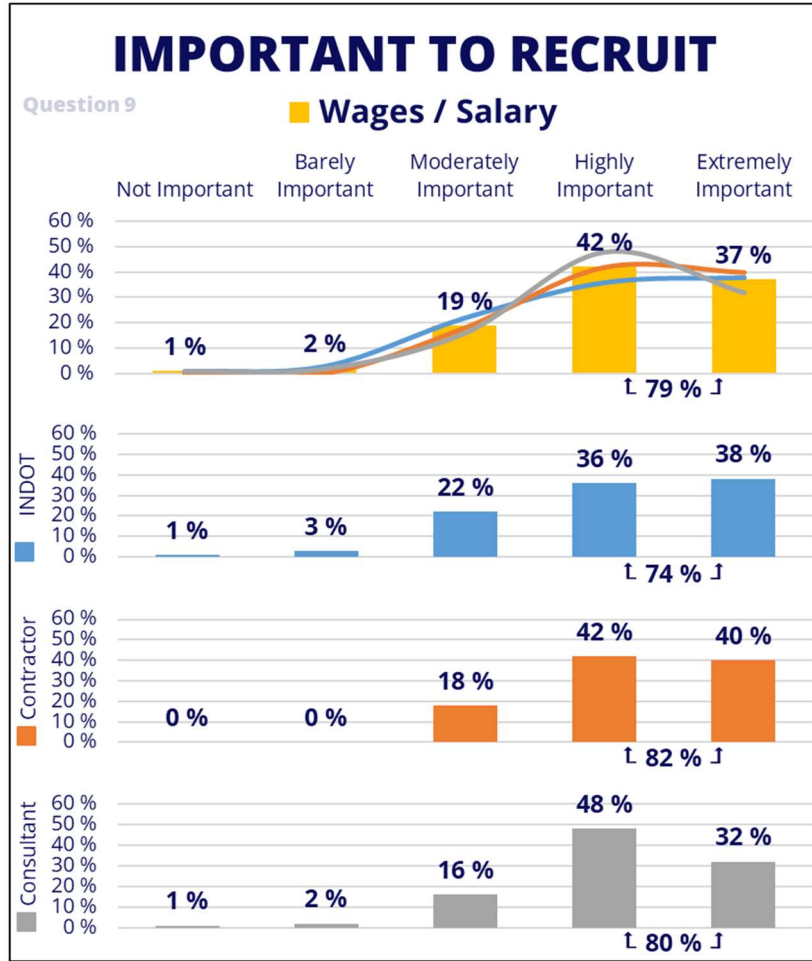
Contractors and consultants agree that stress and overwork led them to consider leaving.

Important Criteria for Employees

Figure 14. Question 9. Which of these characteristics did you think were important when you were last seeking a new job?

Figure 15. Question 8. How important do you think these characteristics are in retaining you in your current job?

The next 12 pairs of graphs address specific criteria for the above two questions: Wages, Work/Life Balance, Work From Home, Morale, Benefits, Flex Work Time, Vacation and Holidays, Retirement Benefits, Promotions, Labor Unions, Passion for Work, and Stress.

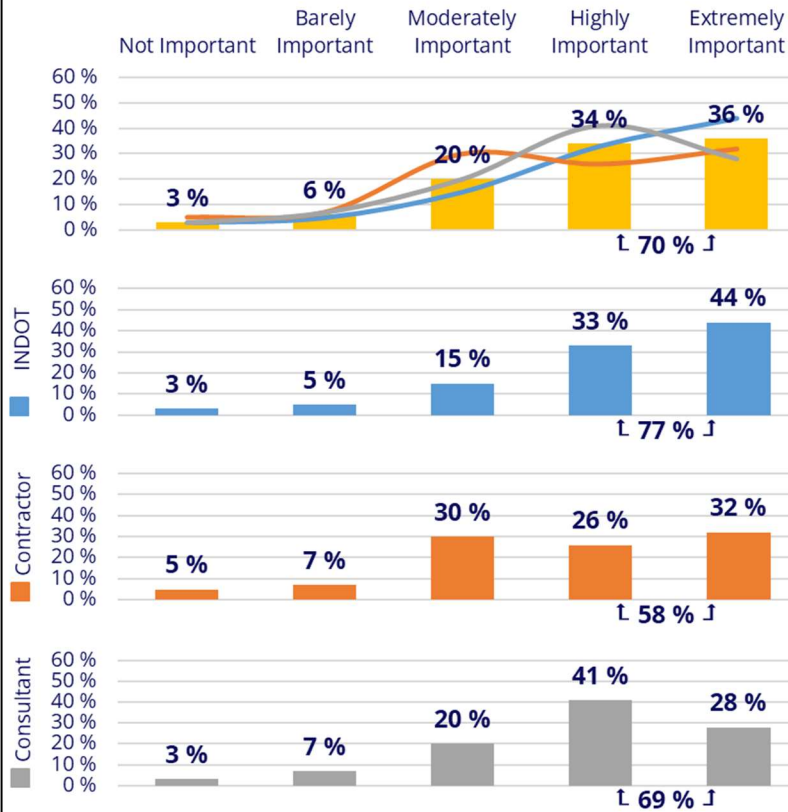


Wages are important in recruiting and retaining employees. Generally, there is not a large difference between the three ITT groups, and attitudes have not change over time. Interestingly, INDOT ranked this the lowest consideration over contractors and consultants.

IMPORTANT TO RECRUIT

Question 9

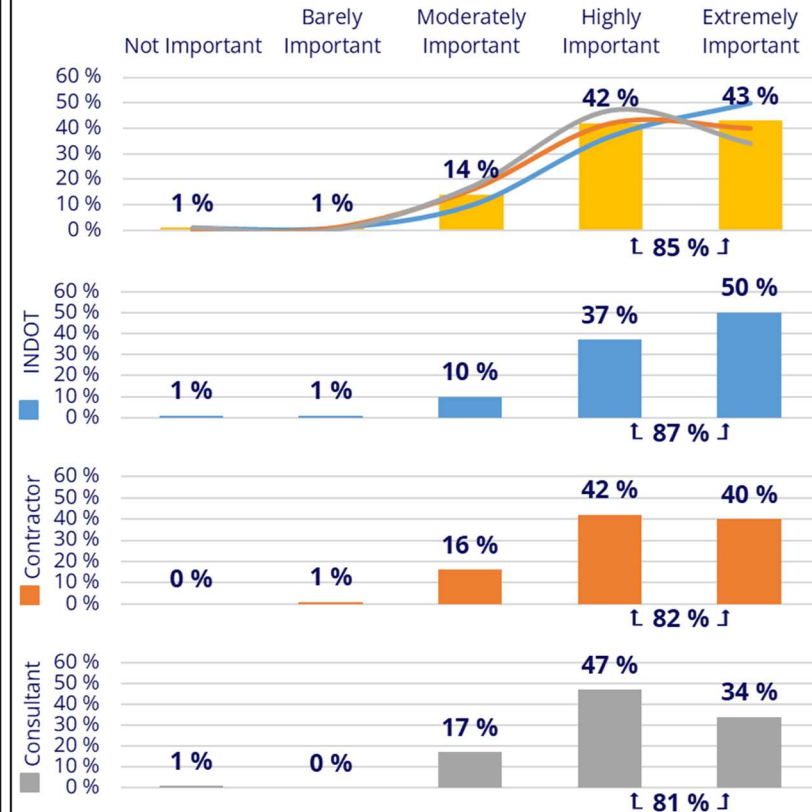
■ Work / Life Balance



IMPORTANT TO RETAIN

Question 8

■ Work / Life Balance

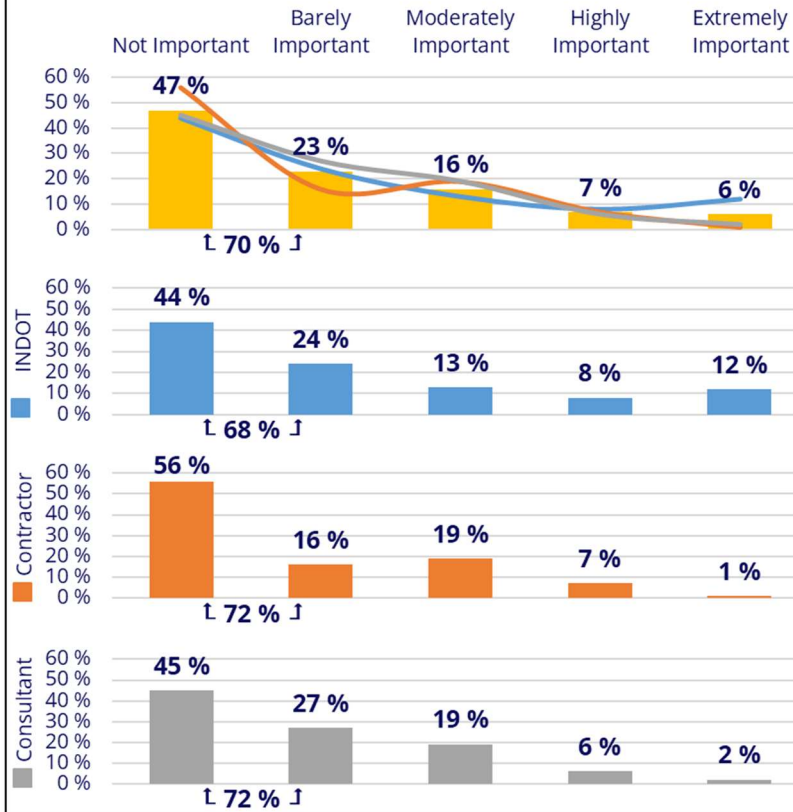


When searching for jobs, work/life balance has some importance. But, after working in the industry, it becomes more important for employees. Contractors have the most drastic increase in ranking the importance of this criteria, with an additional 24% of respondents declaring this as highly or extremely important to keep them in their jobs.

IMPORTANT TO RECRUIT

Question 9

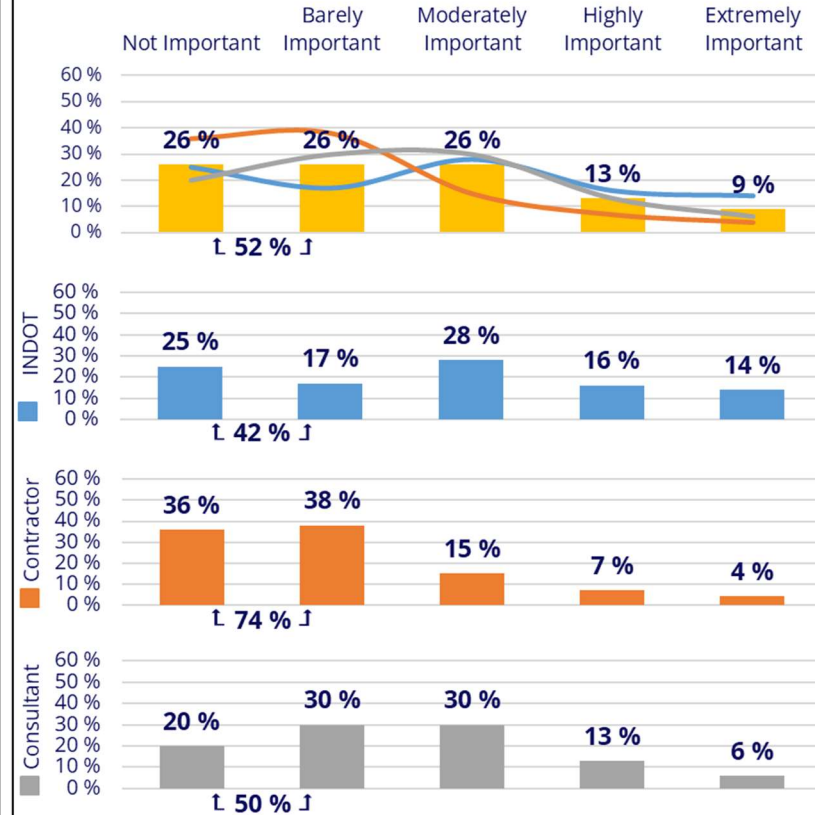
■ Work From Home



IMPORTANT TO RETAIN

Question 8

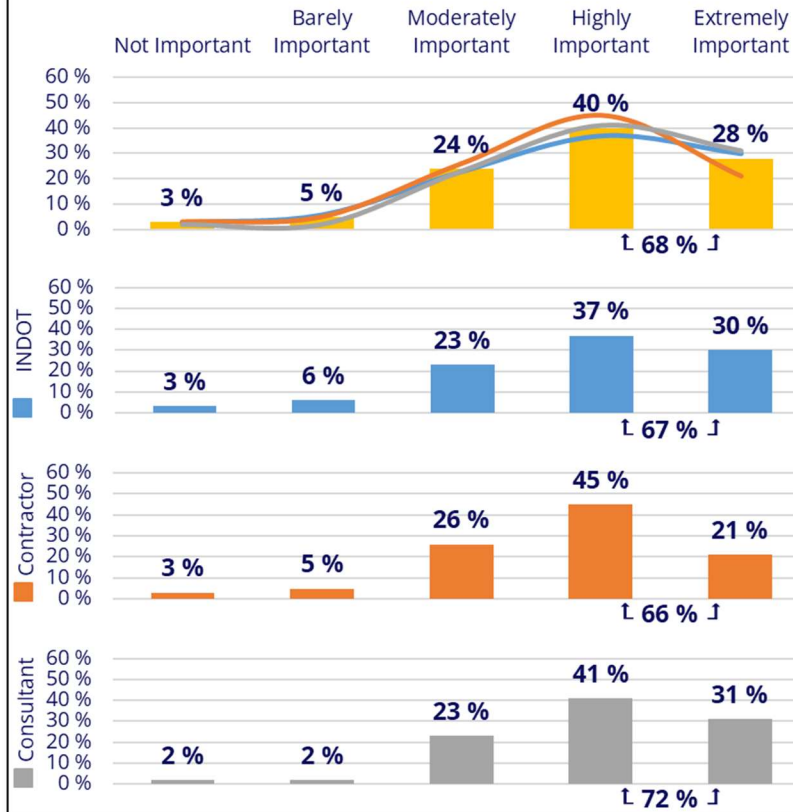
■ Work From Home



When first hired, remote work was not a major consideration for applicants. However, the attitude has shifted, with the importance increasing. This increase is understandable, as remote work was not a major concern or common occurrence prior to COVID-19 in 2020. Contractor opinions also shifted toward more importance, but not toward the higher levels of importance.

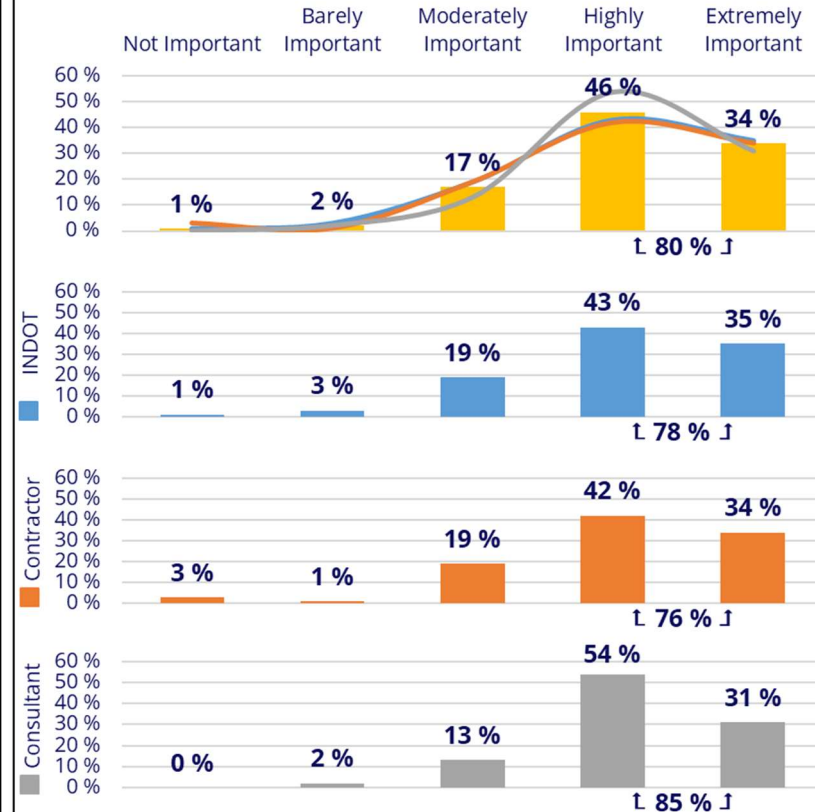
IMPORTANT TO RECRUIT

Question 9 **Morale / Work Place Environment**



IMPORTANT TO RETAIN

Question 8 **Morale / Work Place Environment**

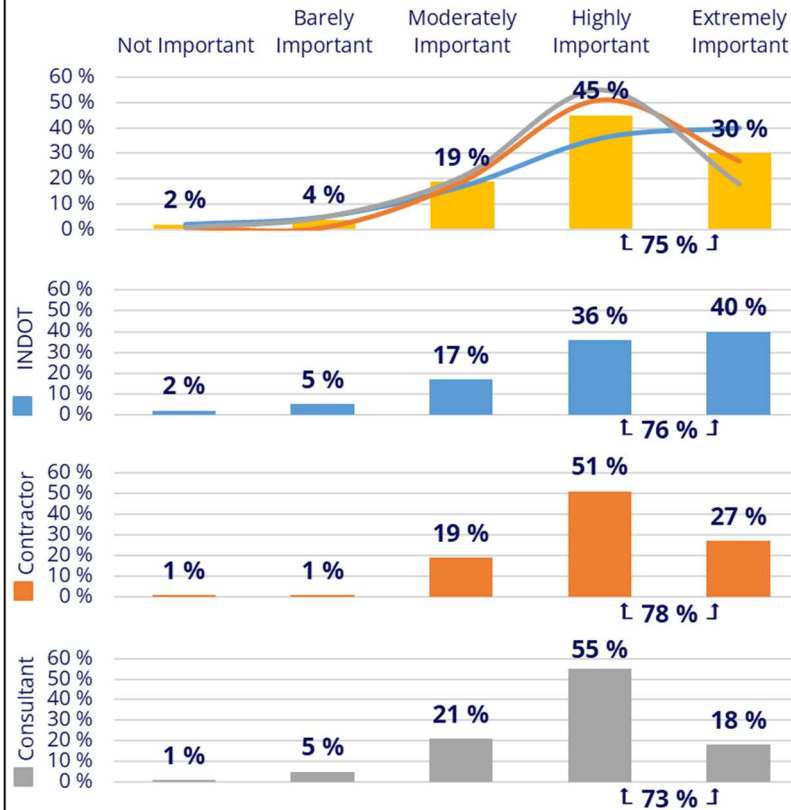


Universally, the workplace environment becomes more important as employees mature in the work force. Comments from other survey questions placed poor management and disagreeable company policies under workplace environment issues.

IMPORTANT TO RECRUIT

Question 9

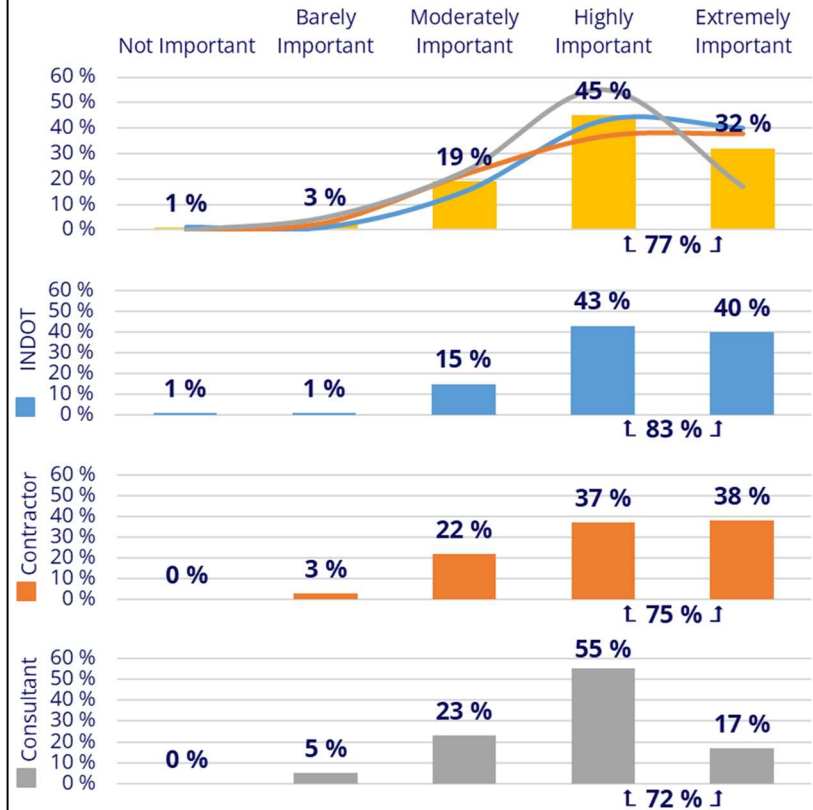
■ Benefits



IMPORTANT TO RETAIN

Question 8

■ Benefits

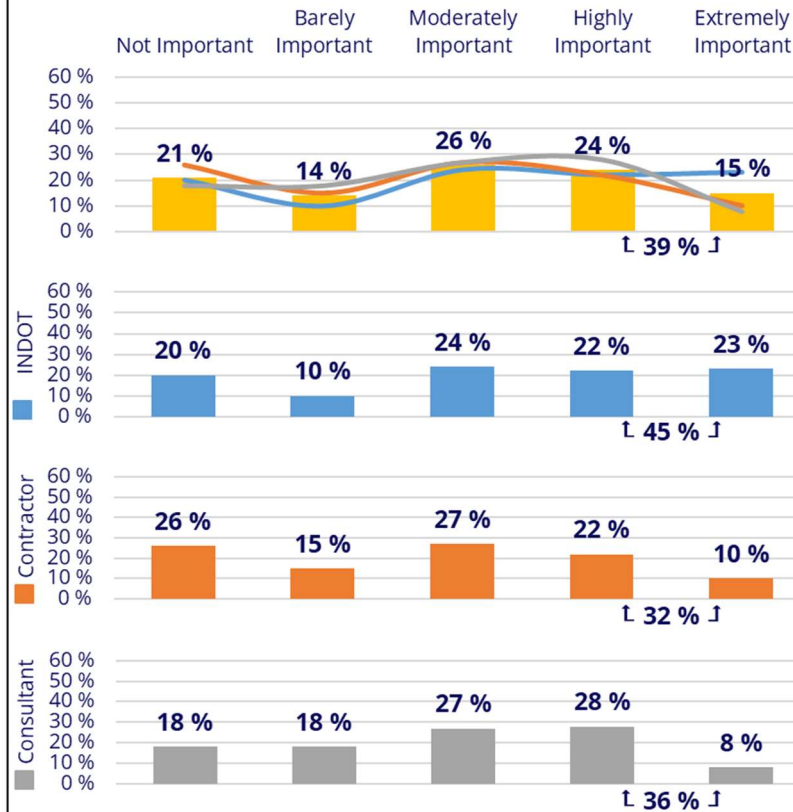


Benefits are important for recruitments actions. As employees gained experience, this importance for INDOT increased. Contractors also shifted the importance a little bit higher. But there was no change for consultants.

IMPORTANT TO RECRUIT

Question 9

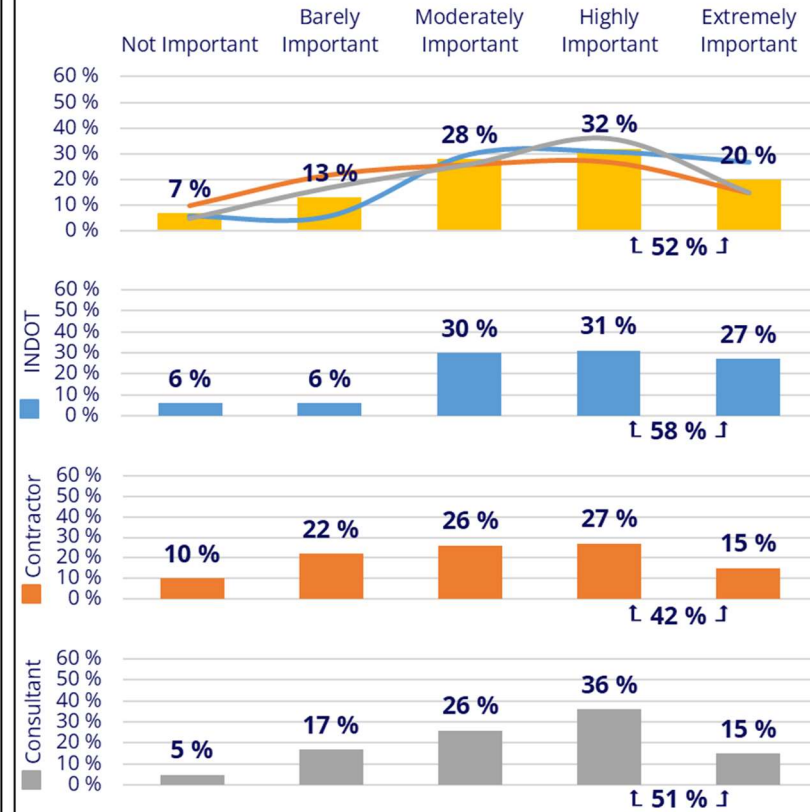
■ Flex Work Time



IMPORTANT TO RETAIN

Question 8

■ Flex Work Time

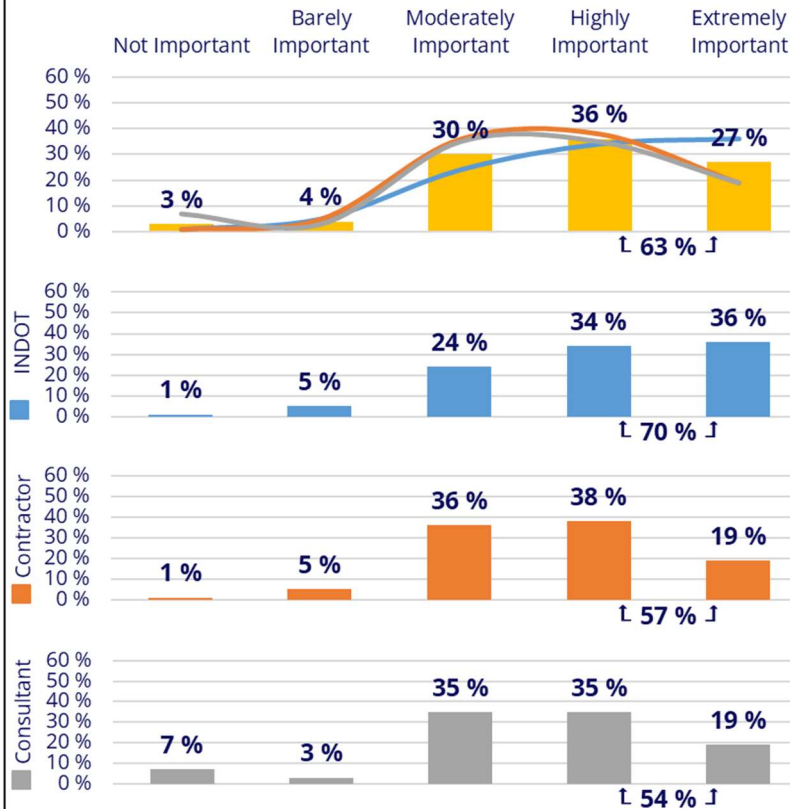


The desire for flexible work schedules was a rare criterion that did not have a distinct opinion from respondents. That is, the importance was distributed evenly across the gamut when people were seeking a new job. After experience, especially now after COVID-19, flexible schedules are slightly more important for employees, though with smaller increases than other criteria.

IMPORTANT TO RECRUIT

Question 9

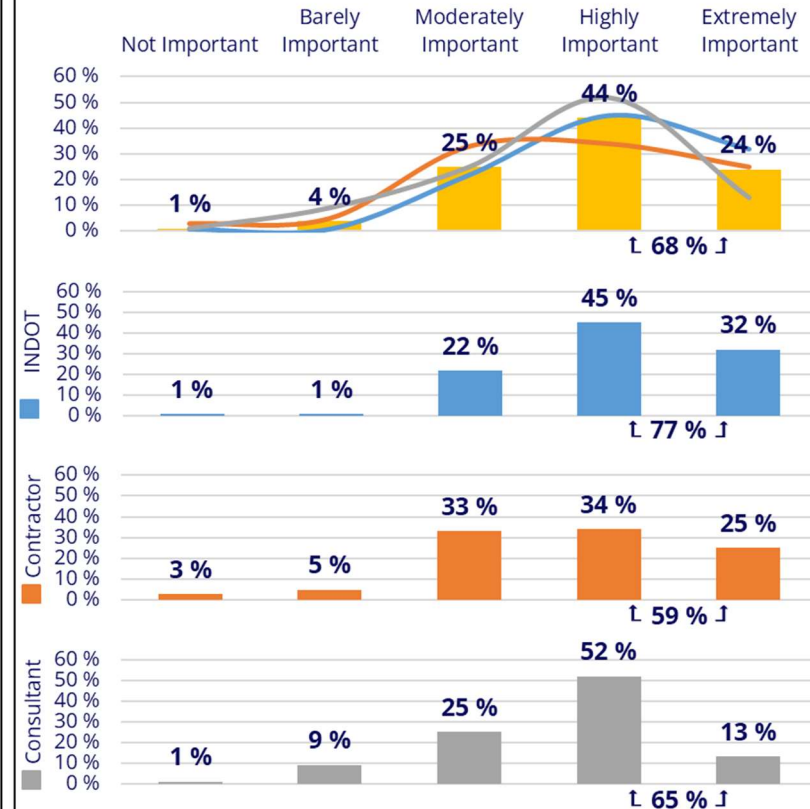
■ Vacation / Holidays



IMPORTANT TO RETAIN

Question 8

■ Vacation / Holidays

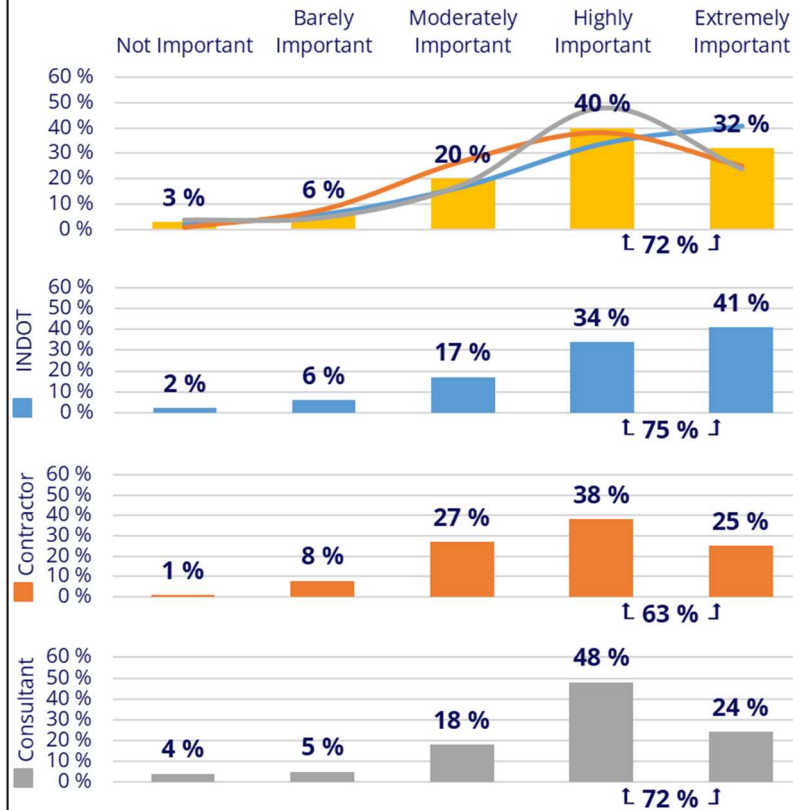


Paid time off through holidays and vacations remain as important now as when applicants were seeking their jobs. For INDOT and consultants, the highest ranking “Extremely Important” actually slid down a little, and the “Moderately Important” slid up, creating new peaks for the “Highly Important” ranking. Contractors shifted to the more important end of the spectrum.

IMPORTANT TO RECRUIT

Question 9

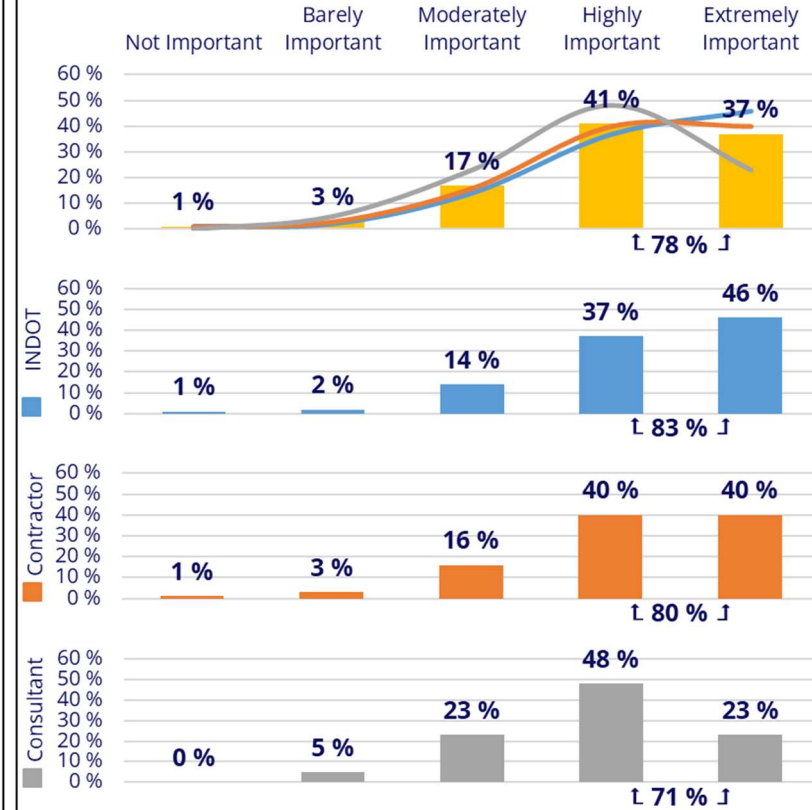
Retirement Benefits



IMPORTANT TO RETAIN

Question 8

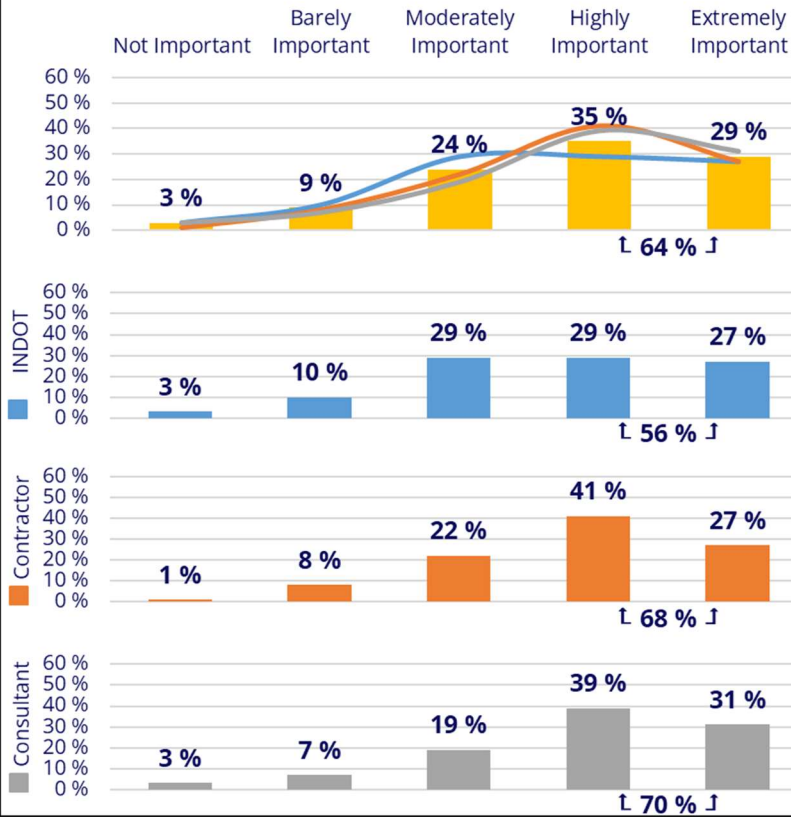
Retirement Benefits



Feelings about retirement benefits closely matched the results of general benefits, with the importance to INDOT increasing and to consultants remaining similar. However, there was a large increase in the importance of retirement benefits to contractors over benefits in general.

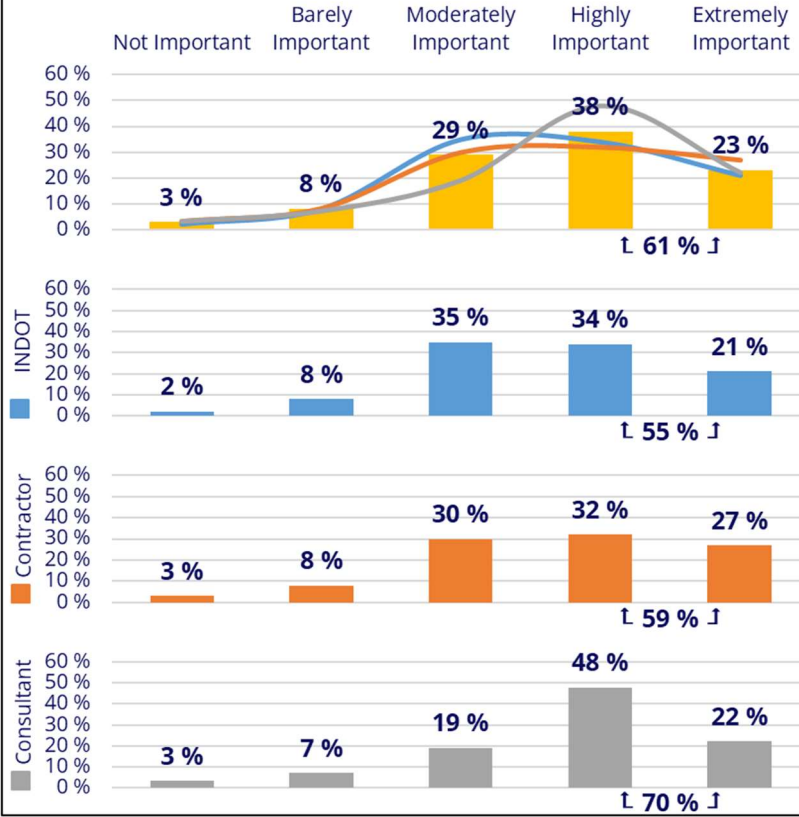
IMPORTANT TO RECRUIT

Question 9 **Opportunity for Promotions**

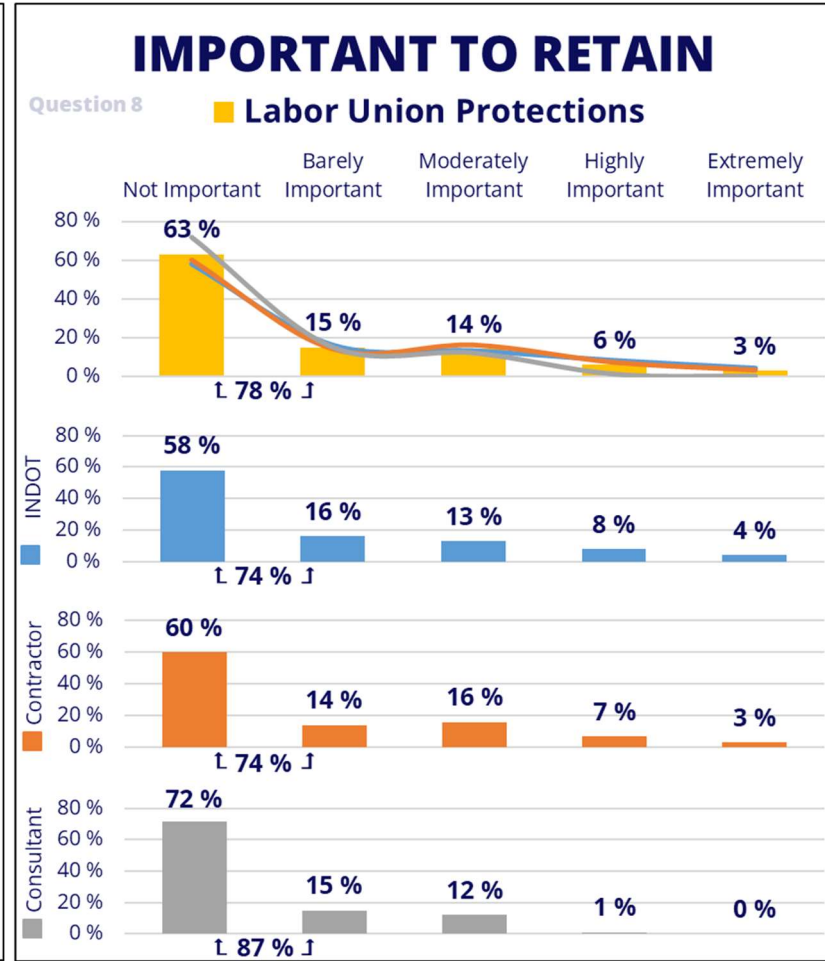
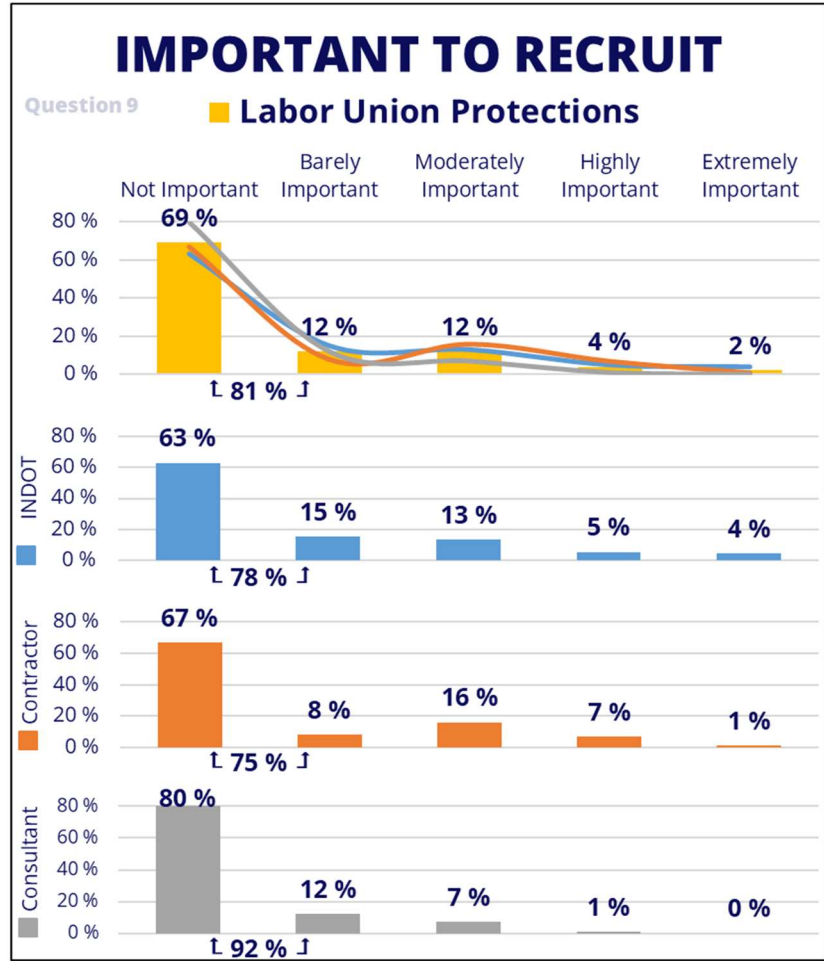


IMPORTANT TO RETAIN

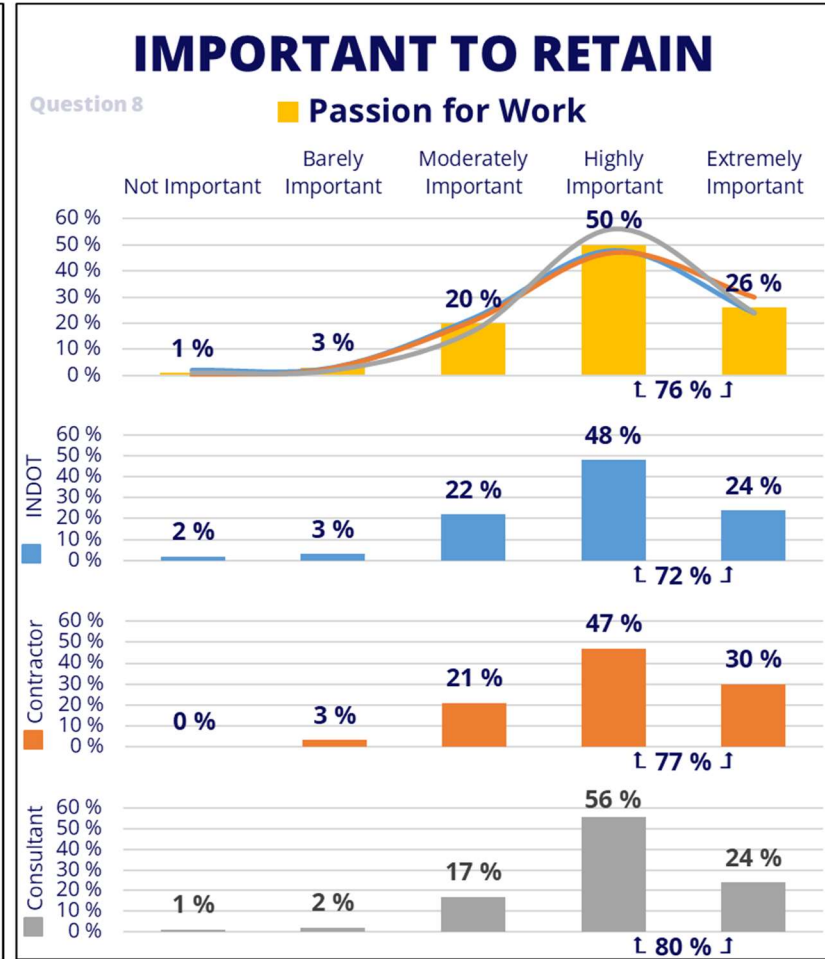
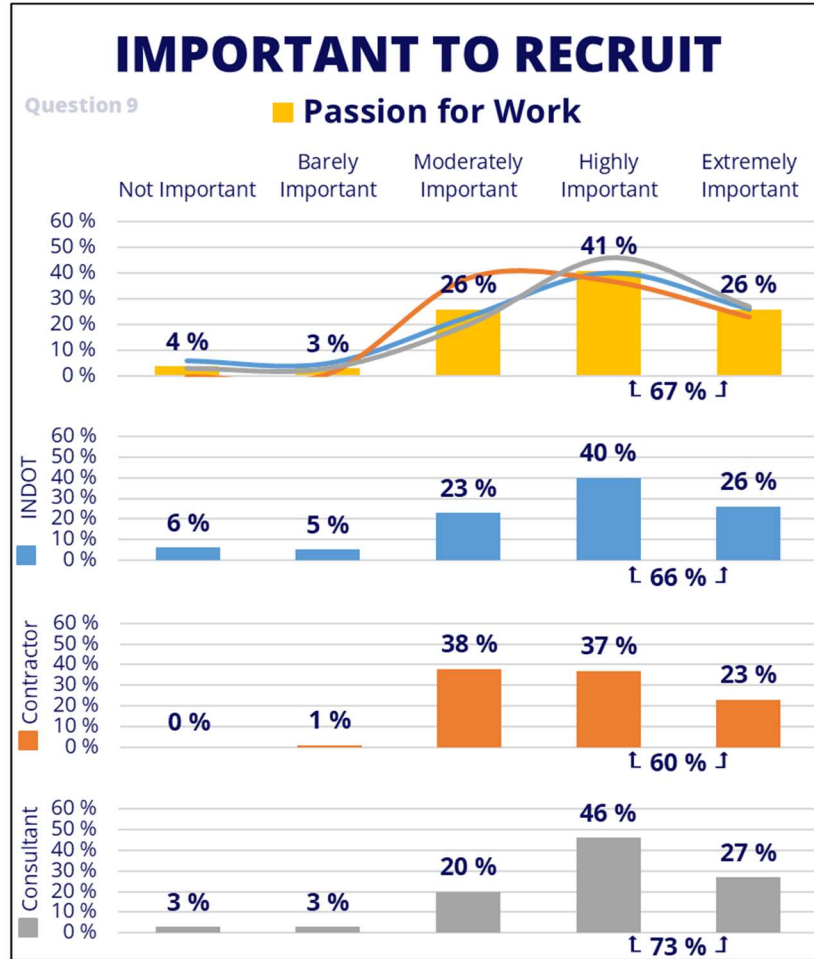
Question 8 **Opportunity for Promotions**



The opportunity for promotions was ranked with some importance for the recruitment and the retention of employees. However, it appears that the importance has actually decreased slightly as employees become more experienced.



In the survey, labor union protections were ranked low. However, it should be noted that for contractors, while having a large majority of the Indiana transportation construction industry work force, the number of responses was similar to the other two groups. That suggests that the field staff, laborers, and operator may have had a significantly lower response rate. These groups, covered by unions, could be expected to have higher interests in this criterion.

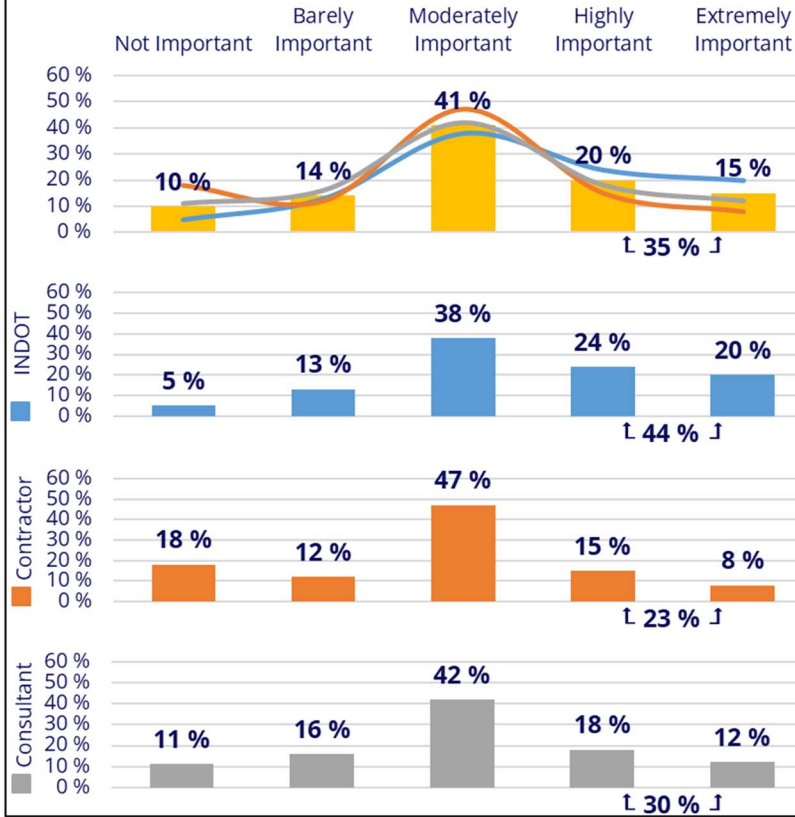


Passion for work has become more important for respondents over time to keep them in their current position. Most drastically is the shift of contractors in the importance they place on passion in their jobs.

IMPORTANT TO RECRUIT

Question 9

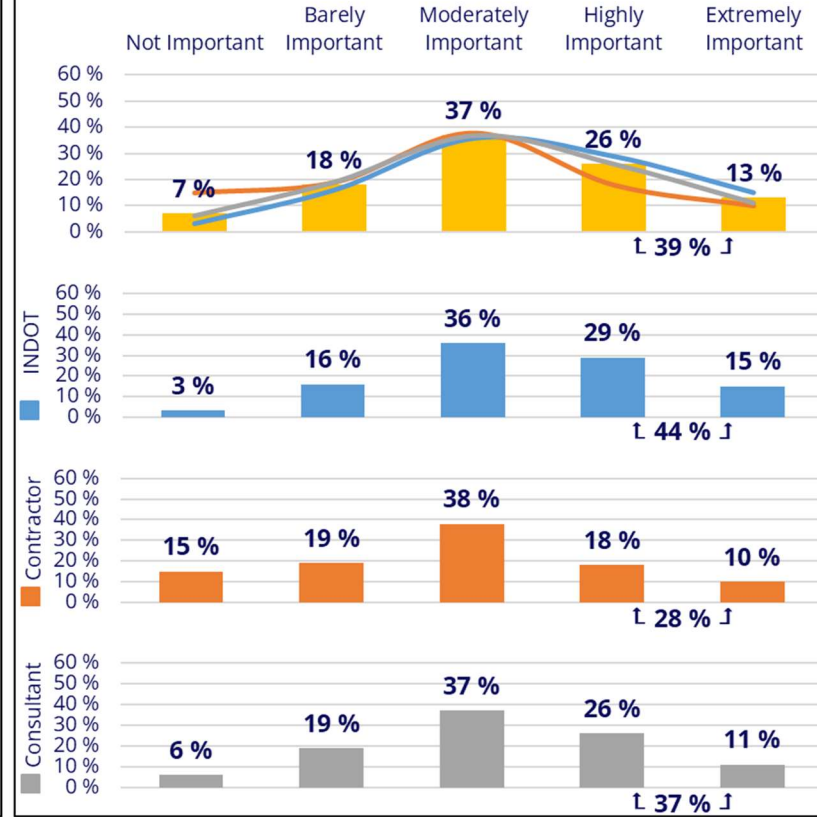
■ Low Stress



IMPORTANT TO RETAIN

Question 8

■ Low Stress



The importance of a low stress job had an interesting bell curve shape for both the recruiting and retention of the respondents in their current jobs. When compared to when employees were first job seeking, the curve has dropped in the middle and the extremes, while increasing in the slightly above and below average opinions.

Recruiting Entry Level Employees

Figure 16. Question 12. Does your current employer pay for additional education / training?

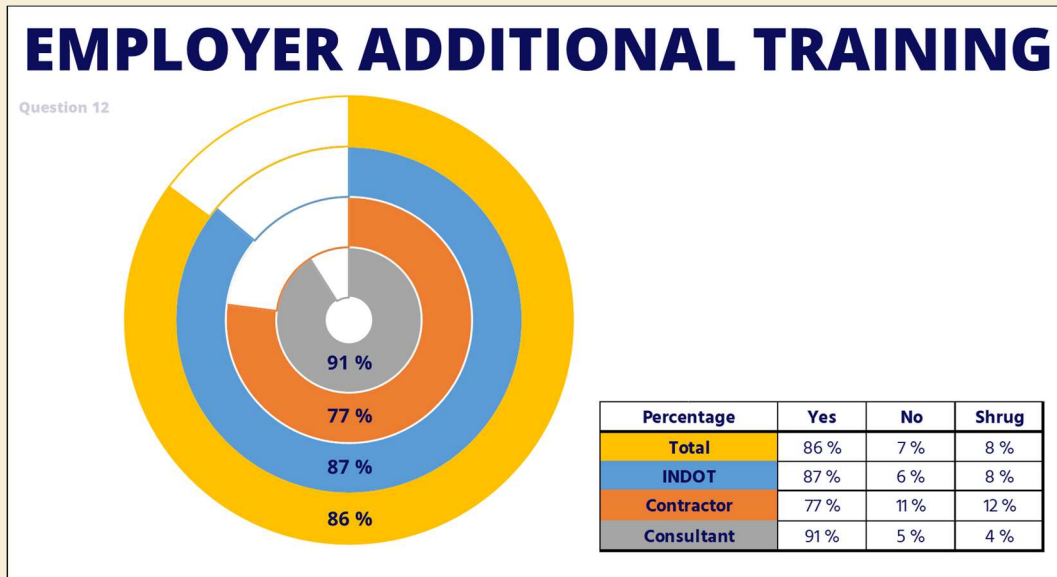
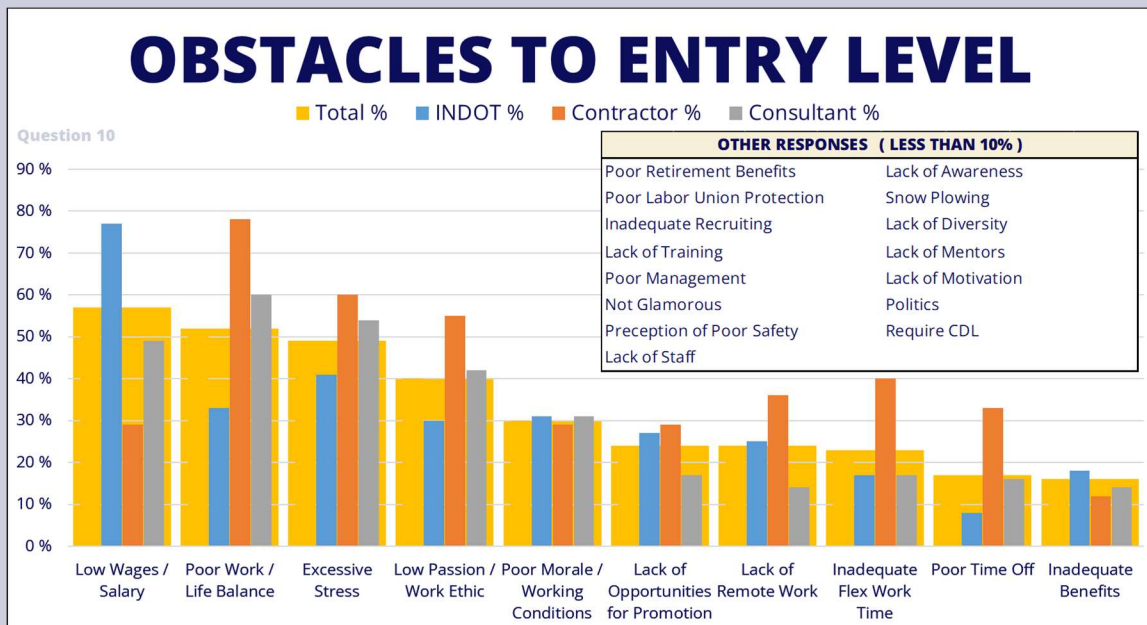


Figure 17. Question 10. What obstacles does our industry have in attracting entry-level employees? (Select as many that apply.)





“A concerted effort to make a college education the end goal for every student, when clearly, some students aren't cut out for that. Lack of respect for blue collar work. Kids don't want to work hard, and this is hard work.” – Anonymous Contractor

“Industries like tech seem more desirable.” – Dandi Prasad, Consultant

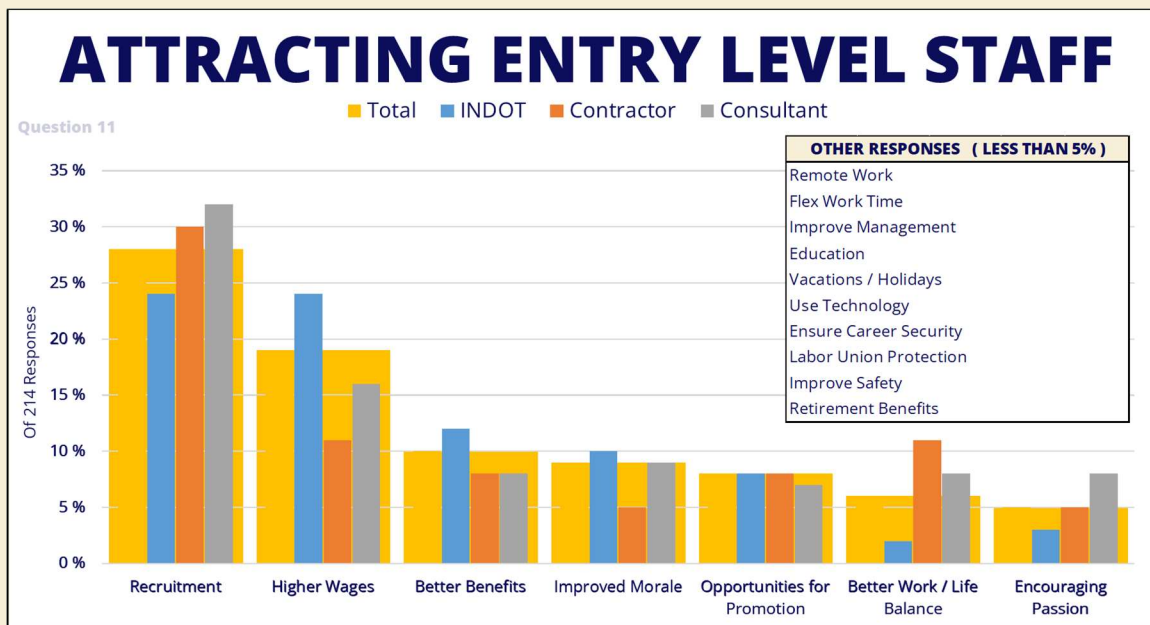
“Lack of good mentors.” – Anonymous Consultant

“Lack of knowledge of variety of careers in our field.” – Anonymous Consultant

“We're not looking for 'entry level', we want pre-trained 'ready to go' employees.” – Chris Stoner, INDOT

“Wages are already hit on, but we {INDOT} are still far enough behind the private sector that it is still a strong issue, now more than ever with more and more work from home jobs and more and more work on your schedule opportunities.” – Anonymous INDOT

Figure 18. Question 11. What ideas do you have to attract entry-level employees? What state-of-the-art or unique ideas should be publicized more so that young people have a piqued interest?





“For engineers, engage people earlier than when they are making their decision about a career. This usually happens when they are picking college, so make civil engineering and transportation and infrastructure important to them. Tell the story about building things. About how their work can help make their community a better place to live. This sounds like a PR campaign, so maybe that is needed in Indiana schools and communities.” – Anonymous Consultant

“More for retaining newly licensed engineers through senior engineers: would be nice to have a progression plan from HE3 to HE1, instead of having to wait for a position to open up, assuming that position is available in the first place.” – Anonymous INDOT

“Many people I went to college with didn’t see civil engineering as being as ‘glamorous/prestigious’ as other branches of engineering like mechanical or aerospace and I think that’s partly because the designers of things like airplanes or a new smartphone receive more public recognition through articles or social media. Highlighting not only a project but also some of the key team members and their contributions may resonate more with potential engineers and help them more easily envision themselves in that position one day.” – Max DiFilippo, Engineering Resources

“I think more exposure to the industry as a whole. Whether that is through STEM, classroom presentations, job shadows, internships, coops, etc. I think it also needs to be geared towards all facets of our industry. Not just engineering, but the trades and work with contractors.” – Anonymous Consultant

“We have to increase starting pay and benefits. We have implemented strong training practices and place new recruits with senior staff/drivers who have the heart of a teacher. Today’s recruits need to be taught by the old dogs in the industry. They must learn from those who know best. Veterans in the industry must strive to be patient and teach, not just complain that these kids don’t know what they are doing. We were all in the same boat at one point.” - Jana Chirico, Laura Kopetsky Triax

“In my opinion, young people want to have a positive impact on the environment, they want benefits such as paid time off, health insurance and retirement benefits. Now more than ever, the option to work remote is a requirement rather than a benefit. Having a positive, team oriented, workplace is also a definite must. People want to feel like what they're doing matters, and that their opinions are being heard.” - Andrea Holdorf, INDOT

“The unique challenges and opportunities in our Industry - Promote how much fun this industry is.” – Tony Evans, E&B Paving



"We can't rely on traditional methods, i.e., word of mouth. We have to effectively tell our story to high school kids about career opportunities vs. a job." – Anonymous Contractor

"Let managers control pay to a degree so they can acknowledge when above average talent wants to join the team. Give managers a 'buffer position' so they can bring someone new aboard and let them learn. Upper management far too often thinks of how to reduce the number of employees, but that demands anyone new is ready go from day 1, and that is unrealistic. Entry level people do not know the business, and if every person is critical then you have no one to teach/train. You can't run a skeleton crew and promote growth. They are conflicting mindsets. You either want a skeleton crew and you don't care about their stress whenever someone leaves, or you give managers breathing room. And yes, people leave suffocating jobs for jobs with breathing room." – Anonymous INDOT

"Find a way to engage at high school/ middle school levels. Hands-on job fair (i.e., let kids operate heavy equipment, or go to job sites, or attend engineering conferences like road school)." – Anonymous INDOT

"I think to attract the younger generation we need to have a pathway for them to follow to get to the level they desire. We need the completion dates to be more realistic so that we can give employees a better work/life balance. Also need to give employees the ability to take time off during the busy season to enjoy their family. These three things are the beginning of helping to attract the next generation." - Lynn Bauer, Milestone Contractors

When asked what the industry could do to attract entry-level employees, for many metrics, consultants and contractors had similar responses. INDOT had a different viewpoint.

For INDOT, answers closely tracked with question 7 (Why did you consider leaving the industry?), with wages and morale being considered key considerations. However, contrary to why people may want to leave the industry, many INDOT employees thought that a concern for stress kept people away from INDOT careers, while they themselves did not find stress a key reason for leaving.

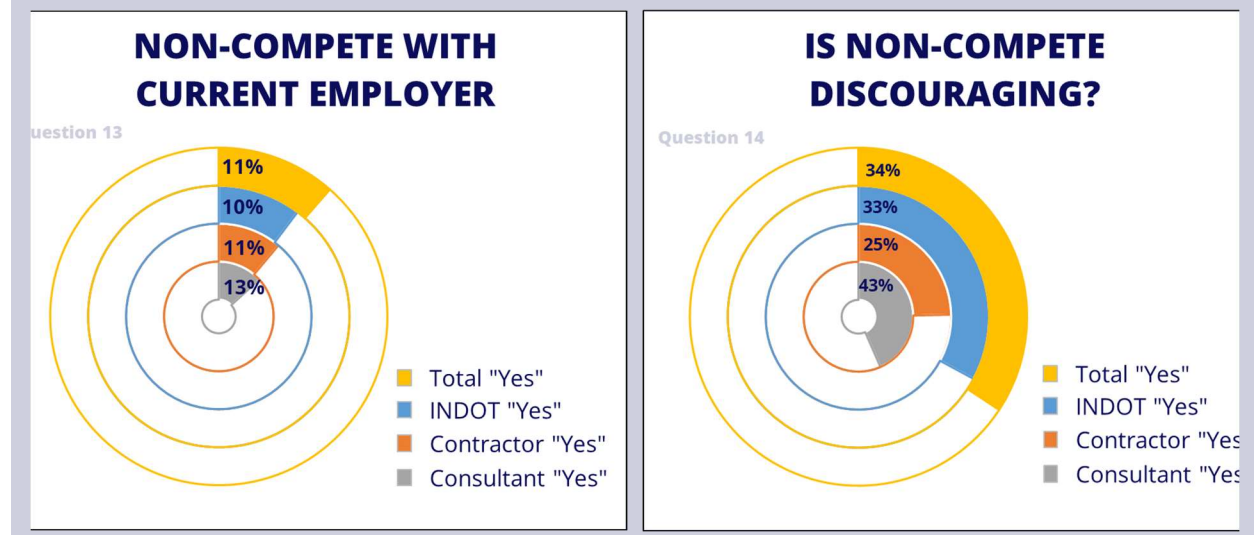
Contractors highlighted that the perception of a poor work/life balance and related issues with work schedules and time off were likely to keep new recruits from contracting positions. This is contrary to why people wish to leave, as poor work/life balance ranked lowly in question 7. As with question 7, however, stress and overwork were key concerns.

Consultants responded with similar comments to both INDOT and contractors, with wages, work/life balance, and stress being key concerns.

All groups suggested that better recruitment efforts were needed to engage new staff into the industry. But, to accompany better recruitment, the other concerns must also be addressed. While you can make more people aware of potential jobs by addressing recruitment, if applicants have concerns about wages and stress, we can't "seal the deal" and add to our workforce.

Figure 19. Question 13. At your current employer, did you sign a non-compete agreement?

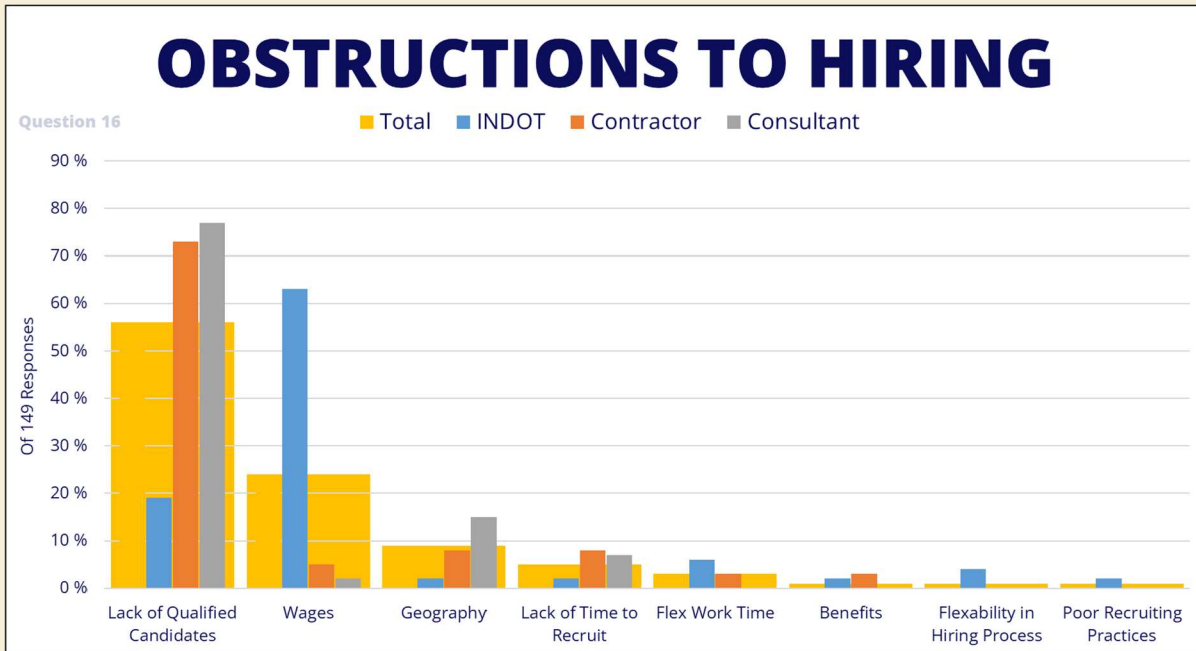
Figure 20. Question 14. Would a non-compete agreement keep you from accepting a new position?



Some industries use non-compete agreements for new hirers to restrict how employees can engage competitors in the industry when they leave a company. Respondents stated that non-compete agreements are not common in the transportation construction industry, with only one in ten being subject to them. However, a much larger percentage (nearly half of consultants, a third of INDOT, and a quarter of contractors) responded that non-compete agreements would be a detriment to accepting new positions. With such large percentages, even though a minority, these restrictions will have a significant effect in expanding the industry workforce.



Figure 21. Question 16. What keeps you from finding the staff you want?



“Competition with other consulting firms.” – David Pluckebaum, The Corradino Group

“Experienced staff: Top talent will succeed where they are, so it is hard to convince someone to leave a good thing. New employees: Indiana may not be the most exciting location to start a career/life when there are opportunities for good jobs across the country.” – Anonymous Consultant

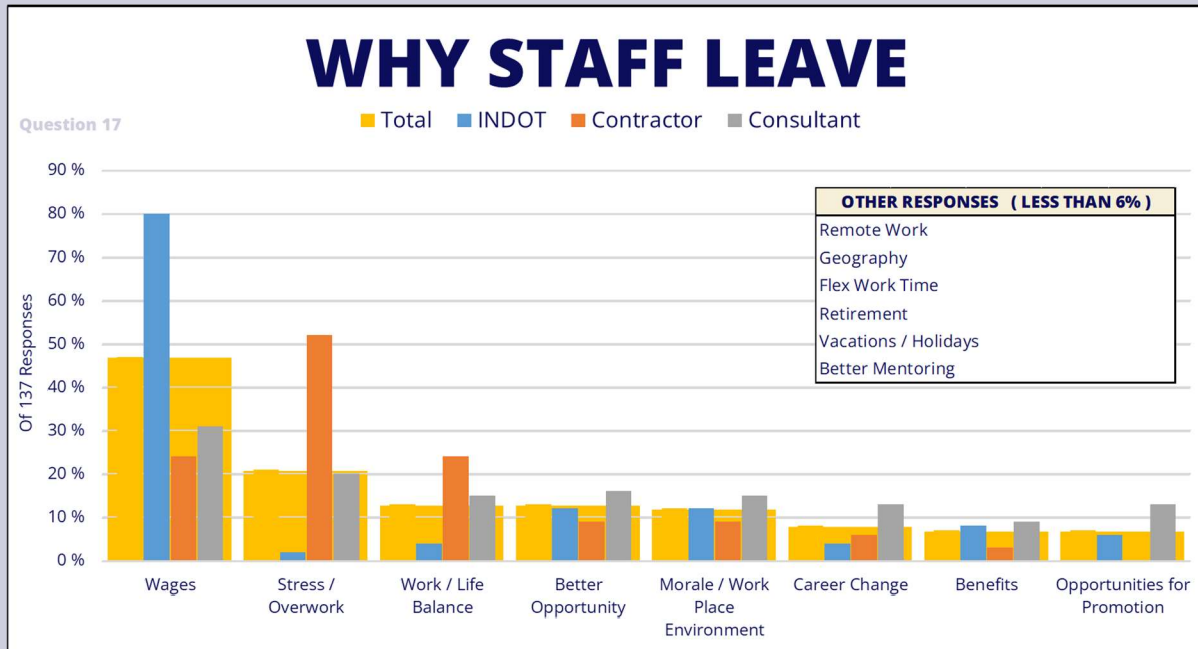
“Salary offering, work at home/flex time policies, very limited opportunities for bonuses for hard work.” – Anonymous INDOT

“Upper management does not give managers the freedom to do so {search for the staff you want}.” – Anonymous INDOT

Hiring managers overwhelmingly thought that there were insufficient numbers of qualified applicants available to increase the industry workforce. When taking this concern in conjunction with the expressed need for more recruitment discussed in question 11, it suggests that increasing the industry workforce must begin early, giving sufficient time for individuals to be trained prior to entering the workforce.

Retaining Employees

Figure 22. Question 17. What do quitting staff tell you in exit interviews about why they are leaving?



“Leaving industry for something else (more common for folks with under 5 years of experience). Others are looking for a different kind of engineering work we do not perform.” – Anonymous Consultant

“That they are leaving for a better opportunity where they can learn and grow. INDOT does not promote growth. They promote reduction in the number of people needed, which hinders growth.” – Anonymous INDOT

“Lost a few people due to work from home. How do you work from home with a construction company!?” – Anonymous Contractor

When staff do leave their positions with employers, the reasons they cite do match the reasons they expressed in earlier questions, especially question 7. For INDOT, it is largely low wages and low morale. Contractors are concerned about overwork and a poor work/life balance. Consultants duplicate the other two groups.

Interestingly, for consultants, many more cited low wages are the actual reason to leave then expressed that as a reason they started to think about quitting.

Figure 23. Question 18. Do you enjoy your job?

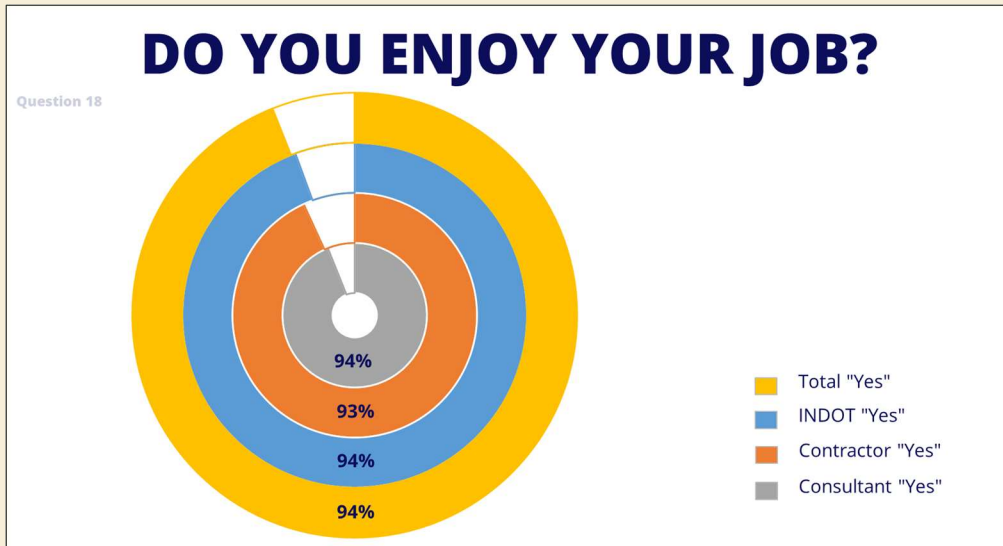
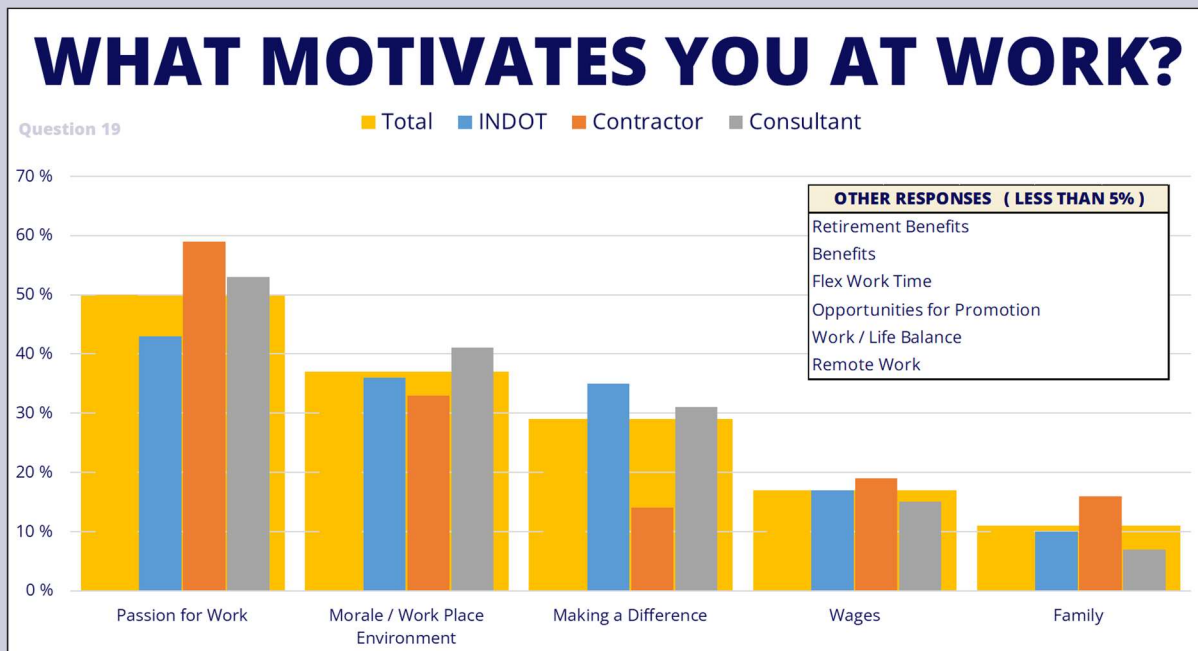


Figure 24. Question 19. What motivates you to come to work?





"I have a passion and a loyalty to my company. I love the atmosphere they've built and how they care for their employees." – Kaylee Angerer, Lochmueller Group

"Love the work I do. Some would consider it 'boring' at times, doing the same thing every day. However, every job (Highway or Commercial) is different, so every day is different. The challenges of figuring out how to build a job in the most cost-effective manner, motivates me every day. Enjoyable co-workers are always a plus as well." – Brian Kochersperger, Fox Contractors

"Serving my state, protecting taxpayer money. Supporting my construction colleagues in the field." – Crystal Weaver, INDOT

"The overall mission, my coworkers, and the satisfaction of knowing we are collectively making Indiana a better place." – Anonymous INDOT

"The opportunity to work with people that I like being around and helping grow financially and personally. Building something." – Doug Nagel, Highway Safety Services

"The fact that I get to be a part of something bigger than myself is what motivates me to come to work." – Ben Albertson, Force Construction Company

"You can make a difference. I love to work with people. I like seeing that what I do continually improves the situation." – Roland Fegan, INDOT

"I have a passion for the construction industry and enjoy the problem solving that is done between all parties." - Jacob Kelley, HWC Engineering

Question 19 was a completely open-ended question, with no prompts provided. Yet, when asked what motivates employees at work, nearly all responses were the same.

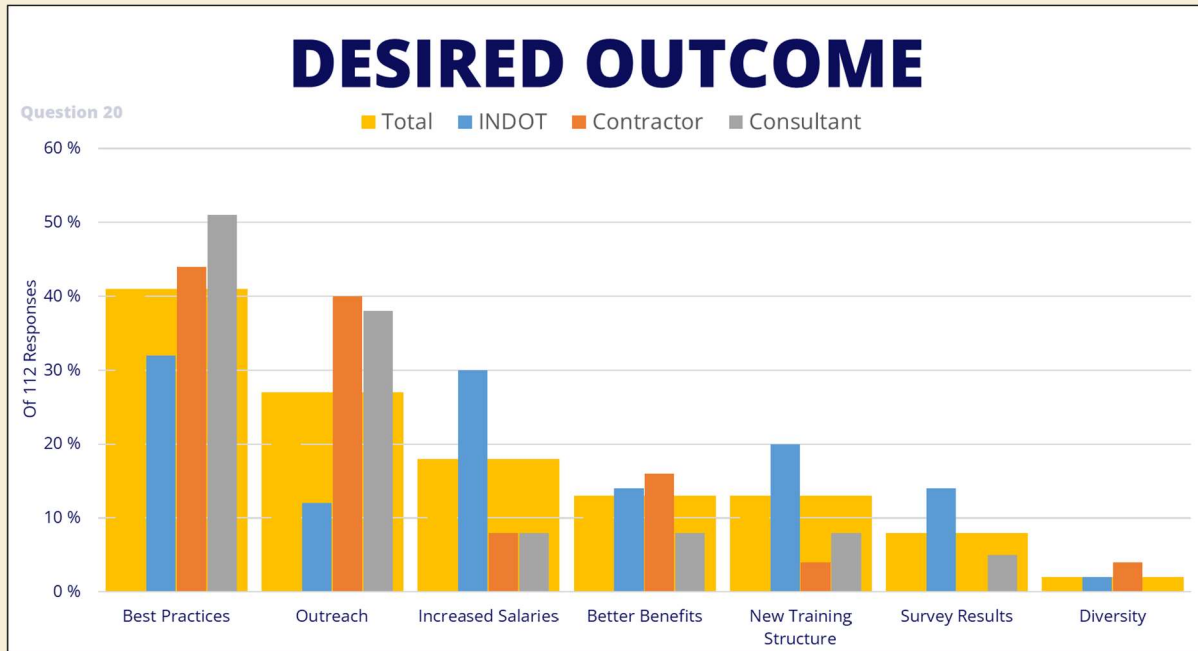
Throughout the industry, the workforce works because they love the job, and they want to make a difference. They also are encouraged by the workplace environment.

This is the good news. Overwhelmingly, the respondents state that they enjoy their jobs. That suggests that actions to improve retention do not need to address the fundamental function of the industry work. Concerns expressed elsewhere in this survey, although significant challenges, are not existential dangers to the industry. That means they can be addressed without completely overhauling how the industry functions.



Next Steps

Figure 25. Question 20. Is there a specific deliverable that you would like to see our committee provide?



So where does this entire survey lead the ITT retention committee? We specifically asked what the survey participants expected to see as a result of our work. After all, this survey is a snapshot in time: July 2023. The data is slowly fading into history, and we need to develop something from this data that will live beyond it.

The problem that the committee has is that the solutions to the concerns suggested in the survey involve policy decisions which must be addressed at a much higher level than the committee can affect. For example, implementing better wages and benefits must be addressed by policy makers that have other interests to consider for a balanced decision.

However, **there are some things that our committee could look at in the future, such as outreach and recruitment practices and other practices to encourage retention.** These issues could be the next step as a follow-up to this survey.

As a final note on the survey, some respondents did provide names and email addresses, but those results are being kept confidential, and are not included in these survey results.



District Meeting

On September 26, 2023, the Retention Subcommittee presented our findings to the Fort Wayne District ITT community. As part of our discussion, we took the opportunity to further our investigation by asking some follow-up questions based on the survey results.

Our methodology was to divide the tables of the room into three groups, with each table focusing on a question related to one of the three constituencies of ITT. The tables were advised to consider the question from the perspective of the stated group, regardless of their actual role in the community.

While some comments may not appear to be feasible under the current approach to project development, design, and construction, we share the following comments from the audience as points to discuss. Even if deemed to be unreasonable, the items provide a starting point in the process to brainstorm solutions to address the key underlying problems.

INDOT

For the INDOT perspective, tables were asked: "What can INDOT do to emphasize the positive aspects of the entire compensation package of wages, benefits, holidays, etc.?"

Many older INDOT employees mentioned that when they were hired, the hiring managers shared a tool with them that aggregated all their benefits into a single compensation number. The tool demonstrated that the state agency included more holidays than the industry average and other good benefits. The intent of the tool was to show interviewees that INDOT, as a total package, was competitive with the rest of the industry.

The audience also stated that INDOT needed to emphasize career opportunities and the opportunities for promotion for all staff. This includes the opportunities of individuals who are interested in the industry, but do not have a technical engineering background. Staff who have experience in project management in other industries can succeed (and have succeeded) with that background.

INDOT should also emphasize the better work/life balance and the lower stress levels (as demonstrated by questions 7 and 17). As a balanced package, INDOT should emphasize the quality of the entire job over solely the wage component of it.



Contractors

For the contractor perspective, table were asked: "Given that many contractors mentioned a lack of work / life balance, long hours, and stress, how can contractors improve this aspect?"

Contractors, of course, have their work schedules dictated by factors external to their control. Deadlines and closure dates are dictated by contracts. More importantly, weather is a random variable that directly affects what work can be performed each day. One table discussed that some more detailed scheduling in the contract documents would give contractors better tools to balance workloads. However, some replies countered that this may limit the contractors as to the methods and means of construction, and could make it more difficult for contractors to be flexible in dealing with schedules, multiple projects, delays, etc.

Similarly, contractors encouraged INDOT to examine the timeframes set for the contract deadlines. In addition to considering impacts and inconvenience to the public, consider impacts to contractor schedules. Especially as the number of construction contracts increases, extending schedules may potentially reduce work stress, thereby maintaining or even increasing the workforce, allowing additional resources to be placed on the projects.

One contractor shared that they have recently initiated a program where crews were guaranteed alternating weekends off work, allowing employees the knowledge that they could schedule time to be with their families. Extra pay around the holidays also helps to mitigate the problems with excessive work.

In addition, crews could be organized based on the desire for work/life balance. With traditional crews, you may have one or two of the employees that would prefer to come in early so they can leave early to catch their child's football or softball game, while others may not mind staying until the sun goes down to rack up extra pay. If a crew could be organized consisting of those with similar goals for time spent working, employees could benefit from improved work/life balance.

Contractor crews could also be distributed so that they are working on projects closer to home. Minimizing commuting time will allow more time with families. Alternatively, the audience mentioned that additional compensation could be provided to offset the additional expenses for more travel.



Consultants

For the consultant perspective, tables were asked: “Would you recommend your own children enter this industry? How can we encourage the younger generation to enter the profession?”

Kids like cool stuff. So, we need to show how cool this industry is. Big bridges, broad highways, bright lights, excavators, and bulldozers. The industry is diverse in its application and challenging in its implementation. This is what we need to share with the younger generation. Build on the passion for the work that brought the current workforce into engineering.

This industry also has long term job security. Transportation will always need a safe and strong infrastructure base, and the infrastructure will always need to be maintained and replaced.

The transportation construction industry is also visible. The rewards of hard work are public and evident to everyone. You can leave your mark, make a difference, and see it for decades to come. And the actual construction is fully public. The most popular toys are construction related: Legos and Tonka trucks and train sets. So, let’s introduce kids to the real-life versions – field trips to the construction site. Show that this excitement can extend into adulthood.

Our industry needs to continue to engage students in college, high school, and even earlier. STEM (science, technology, engineering, and math) is a major focus in education, and we need to include the transportation construction industry specifically. Programs do exist to encourage and mentor students. Future City, bridge building competitions, Canstruction, vocational construction programs such as at Garrett High School and Arcadia’s Hamilton Heights High School. But many of these programs are not widely known, even by those in the industry. We need to market and mentor these programs to encourage interest in the transportation construction industry. In fact, our “three-legged ITT stool”, in relation to this topic, may need to be a “four-legged chair” with educators a part of the solution.



Conclusion

Indiana's transportation construction industry is facing a problem. The extents of facilities the industry oversees and is responsible for will not decrease – roads aren't being removed, and bridges aren't being demolished. However, as we look into the future, the number of people we have to perform the work to build and maintain these facilities will decrease.

To solve this discrepancy, the industry must either increase the workforce or increase the work per individual. Technology, such as artificial intelligence and robotics may provide some future relief. For example, roadway design and construction are being done now with comparatively less human resources because of the introduction of drafting software and mechanized construction equipment. But, if we wait for technology to solve our problem, we may misjudge how much our efficiency can be improved with technology and fall further behind.

And even if technology is implemented, recruitment and retention are important keys to building the workforce that will be needed to implement this technology. We will be competing with other industries and with other states, and if we don't act now to get ahead of the problem, it will become more difficult in the future to catch the problem to fix it.

The problem is defined. The solution still needs to be found.



Subcommittee

W. Scott Allen, P.E., Jason Hanaway, P.E. Joe Thomas	Engineering Resources INDOT Milestone Contractors	Chairman Presenter Presenter
Jordon Beaver Matt Bobay, P.E. Diane Keefer Trenton Knox Angela Nicholson, P.E. Scott Sandstrom, P.E. David Schoeff	INDOT American StructurePoint INDOT E&B Paving INDOT CDM Smith INDOT	

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