

1. How can experienced engineers better collaborate with younger engineers while understanding the needs and perspectives of the next generation?

It's important to bridge the gap between young professionals and seasoned engineers. Younger staff tend to rely more on digital tools and quick communication, while experienced engineers bring valuable knowledge and a more detailed approach. Staying consistent with communication, looking at projects as a whole, and using the right technology can help keep everyone aligned and avoid delays.

A good example of this is walking younger staff through how their individual tasks fit into the full project instead of just assigning work. Also, asking for feedback on how they best learn or prefer to communicate can go a long way in improving collaboration.

2. What is one idea or change young professionals believe could improve how engineering projects are delivered today?

Young professionals want to be more involved in all phases of the project, not just isolated tasks.

Standardization of plans, details, and specifications would help keep submissions more consistent and reduce confusion.

There is also a strong push for digital delivery methods and better use of technology.

More consistent communication, such as regular status meetings between PMs and consultants, was also mentioned.

Additionally, gaining actual field experience helps connect design work to real-world conditions, especially for visual learners.

Keeping documents up to date and easily accessible can also reduce delays caused by miscommunication.

3. What makes a young engineer stay at a company or agency long-term?

Young professionals want recognition when they do well on a project so they know they're on the right track.

They want continually increasing responsibilities corresponding to their level of experience.

They want to grow with mentorship and always have someone to ask questions that are thoroughly explained why we do something rather than just tell them to do that thing.

Good work-life balance was a main focus. People don't want their whole life to be about work and they expect that balance to be present.

4. How can experienced engineers best transfer knowledge before retirement to Young Professionals?

Knowledge transfer works best when younger staff are included in meetings, decisions, and email discussions so they can learn in real time.

Giving them some autonomy, even if it comes with small mistakes, helps build confidence and experience.

It also helps to have one central place to track milestones, recurring issues, and key decisions. Keeping documentation organized and consistent, using tools like SharePoint prevents important information from getting lost.

Experienced engineers should also take the time to understand individual strengths and guide younger staff accordingly.

5. What is one way organizations can better support or empower young engineers early in their careers?

Organizations can support young engineers by providing opportunities to attend events, trainings, and connect with others, such as ASHE events and PennDOT trainings. This helps build relationships and exposes them to how other offices operate.

Providing a variety of work early on is also important, so they are not stuck doing the same tasks and can develop a broader skillset. Incorporate discussions at check-ins to see if the young staff are enjoying what they're doing or want to try something else and support them if they want to change specialties/focus.

Opportunities to meet people across different offices face-to-face can also help them grow both professionally and personally.

6. How comfortable are young professionals speaking up or challenging ideas in meetings with senior staff?

It varies by person and by workplace, and it often depends on who is in the room. Early in their careers, many young professionals are not very comfortable speaking up or challenging ideas.

As they gain experience and build relationships with their supervisors and coworkers, their confidence tends to grow and they become more willing to share their perspectives.

One of the most effective ways to encourage that is for senior staff to actively ask for feedback and make it clear that input is welcome.

7. What is one thing senior engineers or managers have done that made a big impact in balancing independence and growth during your early career as an engineer?

One approach that makes a big difference is giving early-career engineers a task they can own, with enough budget and time to let them work through it and problem-solve on their own first. Afterward, having an experienced engineer review their work and talk through what went well and what could be improved creates a strong learning loop. It also helps set the young professional up for success by talking through the task before they begin, providing clear direction, healthy guardrails, and expectations around scope, deadlines, and an estimated number of hours.

The balance is to avoid micromanaging while still adjusting support to match someone's experience level as they grow. Asking them to reflect—such as sharing a few questions they ran into along the way even if they determined answers—can help foster critical thinking and turn routine assignments into development opportunities. When possible, including younger staff in client meetings is another high-impact step, since observing (and participating where appropriate) builds confidence and helps them understand how decisions get made beyond the technical work.

8. How early should young engineers be given responsibility on projects?

Young engineers should be given responsibility early on, but with the right level of support.

That means pairing responsibility with mentorship, clear guidance, and defined expectations, especially around what the task is and when it's due.

It's also important that the work matches their experience level, so they can build confidence without feeling overwhelmed.

As they grow, their responsibilities should scale with them, allowing for continuous development over time.

9. What's something non-technical that's been unclear to you early in your career? This could be related to how your performance is measured, job metrics (like utilization), your company structure, career ladder, pay/benefits, project administration, etc. that you wish was more transparent or clearly explained.

Many younger engineers want a clearer picture of the full project process from start to finish—from advertisement through delivery and construction—so they understand how their work fits into the bigger project/timeline. They also want more transparency around how budgets are built and what that means for hours allocated to different roles (EI, EIV, etc.).

Straightforward explanation of utilization and how it's calculated (including how PTO and other items factor in). If company has an “unlimited PTO” policy, clearly outline realistic expectations.

Related to that, it helps when companies are explicit about the balance between billability and overhead, especially when people experience “billability is so intense lately that there is no time for overhead” and then aren't sure how to handle training, conferences, or networking.

Clear organization charts.

Young professionals wish they understood earlier on what the different career paths were, how they start progressing along a path, how they advance, etc. They said they could see both “technical track” and “project manager track” professionals in their offices, but didn't understand how you end up on one track or the other, and how advancement really works.

Setting expectations up front around overtime, including what “X hours” looks like when deadlines tighten helps provide clarity to teams. Young professionals said sometimes when a project hits, it can seem like one or two people are carrying the team while others are working no overtime. They understand that sometimes overtime is necessary, and wish their managers just told them explicitly how many hours were expected instead of vaguely asking them to put in some extra time. They want to see everyone on the team contributing equally.

Clearly communicating what can and cannot be charged as non-billable along with reimbursement expectations (so labor and expense expectations), including the charge code to use goes a long way in establishing expectations. In general, the more clearly policies, benefits, and expectations are explained, the easier it is for younger staff to focus on doing good work.

10. Tell me why you do or do not want to get involved with professional organizations.

A big factor is work-life balance, especially for people with families or other responsibilities.

Many professional organizations require time commitments outside of normal working hours, which can make it harder for some people to stay involved.

That said, there's generally more interest in participating when involvement is supported by the company and can happen during the workday.

So overall, people do want to be involved but the timing and support structure make a big difference.

For people who have to pay out-of-pocket (State employees), that could be a burden preventing them from participating. Expectations regarding expense reimbursement and labor charges must be clearly explained with charge codes provided.

Unclear benefits of participation could keep people from participating.