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Ryan Barone – ID TECH (January 20, 2023)

1. STEM jobs are projected to grow 8.8%.
2. Specifically, software development employment is projected to grow 22%.
3. Employment in STEM occupations has grown 79% since 1990.
4. **A computer science major can earn 40% more than the college average.**
5. **The average salary for all STEM workers is \$100,900.**
6. STEM occupations are projected to grow 10.8% between 2021-2031.
This is compared to only 4.9% growth for all other careers. (Via the [Bureau of Labor Statistics](#))
7. **The US placed 30th of 64 countries in math, and 11th in science.**
8. Only 20% of US high school graduates are prepared for college-level coursework in STEM majors.
9. **74% of middle school girls express an interest in engineering, science, and math.**
But only 0.4% choose computer science as a major when they get to college.
10. 2 out of 3 US women say they were not encouraged to pursue a career in STEM.
Just 31% of women with a STEM bachelor's degree go on to pursue a career in the field.



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Dennis D. Truax, Ph.D., P.E., DEE, BC.WRE, F.NSPE, F.ASCE

Article published in the September/October issue of CIVIL ENGINEERING

The U.S. Bureau of Labor Statistics projects a need for about 25,000 new civil engineers each year throughout this decade.

However, this number is based on the need to replace workers; it does little to consider the impact of the Infrastructure Investment and Jobs Act and civil engineers' roles in its implementation. Moody's estimates that infrastructure projects will create 883,600 jobs by 2030, and per capita income will increase by 10.5% as a result.



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As civil engineers, we're creating the foundation for individual prosperity, industrial development, and economic success in our communities.

- **Do those at your local middle and high schools understand this?**
- **Are you and your organization engaged with universities in an effective way?**
- **Are we working to make a civil engineering career attractive?**

Try doing a web search on "image of civil engineers."

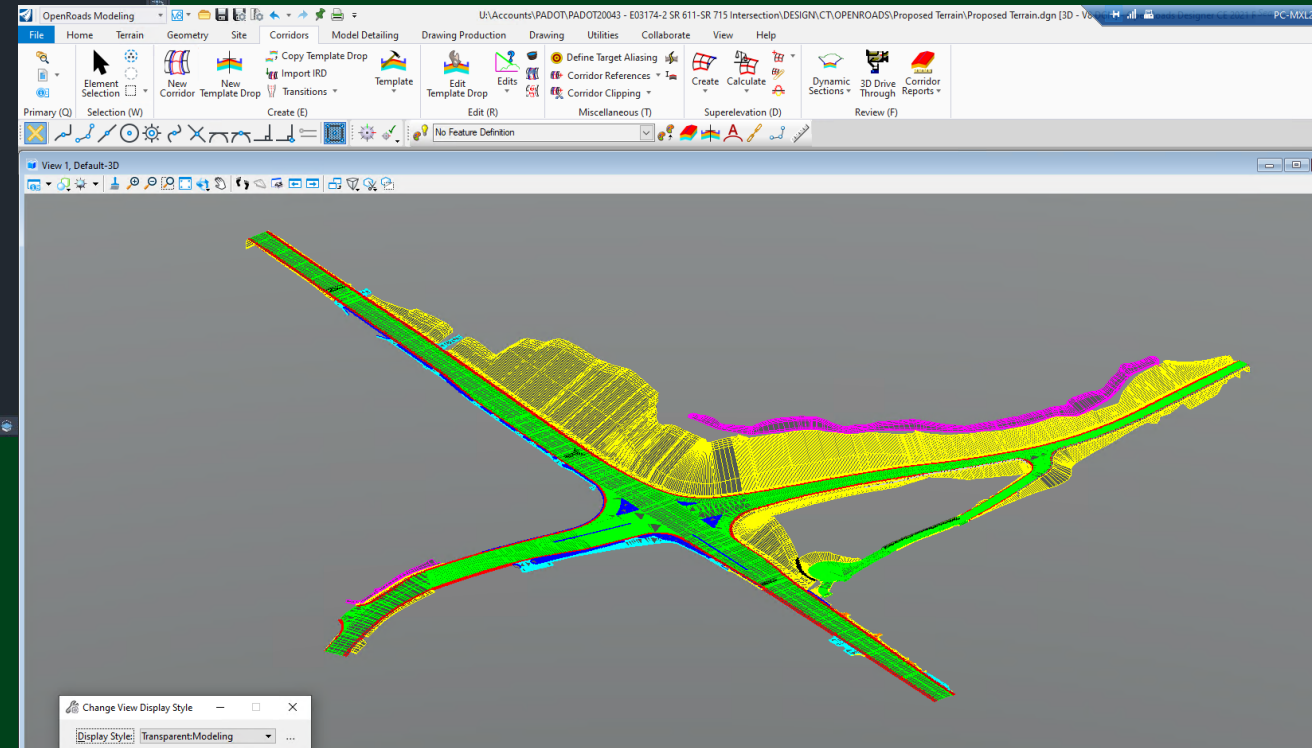
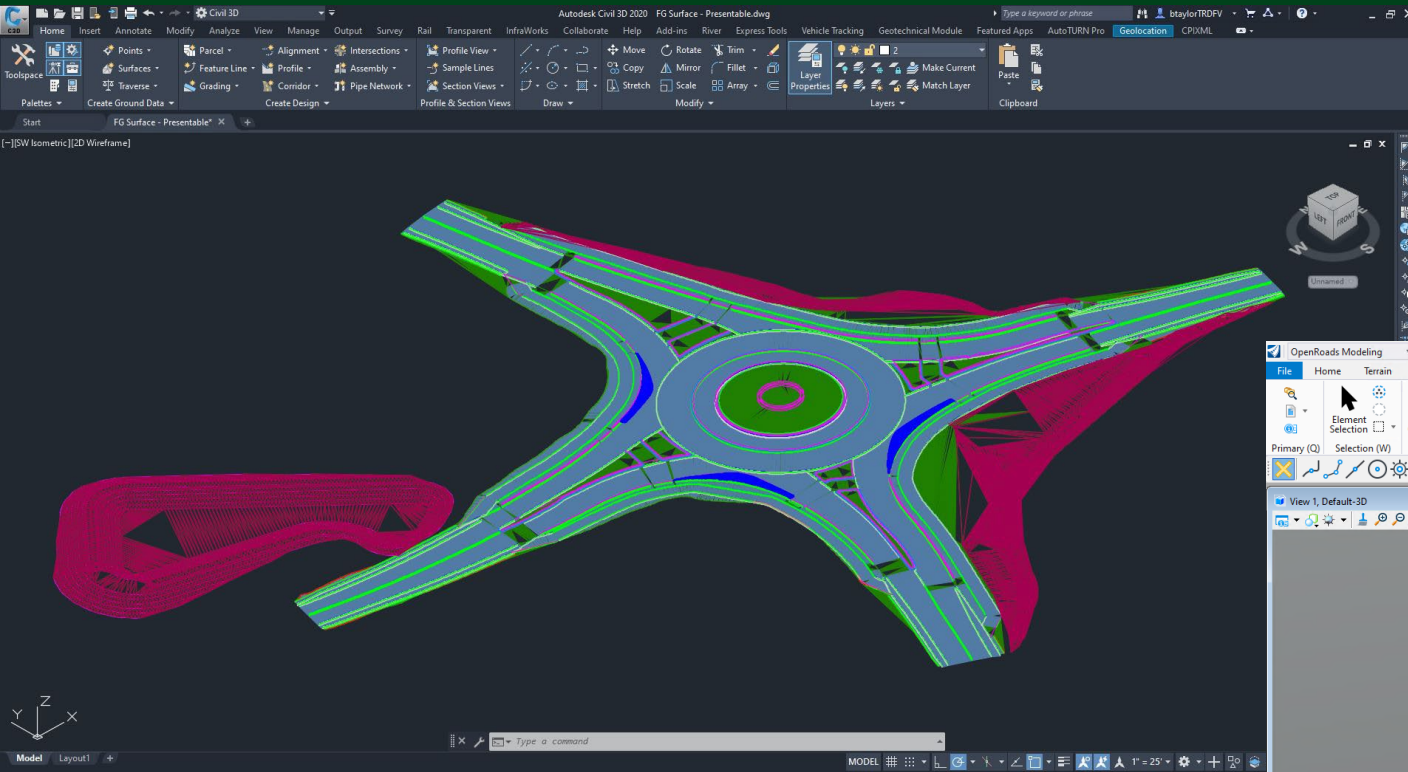
- **Do you see yourself?**

I don't! Sadly, neither do many of those who would be great civil engineers.

[23,743 Civil Engineering Stock Photos, High-Res Pictures, and Images - Getty Images | Construction, Construction and engineering, Engineering](#)



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Trevor English – Civil Engineer June 24, 2021

Data gathered by the Washington Post suggests that as many as **75%** of those with science, technology, engineering, and math (STEM) degrees don't work in their respective fields.

Engineering degrees have some of the highest dropout and attrition rates compared to any other degree path.

According to research from the National Center for Educational Statistics, **48%** of engineering students between the years 2003 and 2009 dropped out before graduation.

The statistic that **75%** of engineers aren't working in engineering disciplines can be considered the "after-graduation" attrition rate.



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Trevor English – Civil Engineer June 24, 2021

One of the best and most effective ways to get kids interested in engineering is through practical demonstration or engaging media. As kids turn further and further into media consumers in the modern era, meeting them right where they are with engineering education is often the best and easiest way to go. This means engineering-related YouTube videos, Tik Toks, or on a more local front, engineering demonstrations in school. Projects in school like bridges or mouse-trap cars are some of the best ways to engage a student that has never engaged with engineering before.



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What can I do?