

Technical Lead, Infrastructure and Innovation

Who are they?¹

The Technical Lead of Infrastructure and Innovation leads a team by motivation, facilitation, and organization. They must demonstrate professional excellence in organizational structures and facilities that a society or company needs for operation. Infrastructure can include roads, buildings, power supplies, and computer systems. The technical lead will focus on computer systems and computer architecture to support the infrastructure.

What do they do?

Technical Leads develop the structure and plan for computer systems across a large government or business unit. They look for new technologies to innovate and plan for the future of the group. They are responsible for compliance with local, state, and federal standards and regulations. The Technical Leads must provide professional development for the team to set them on a path for innovation and excellence. Technical Leads in Infrastructure and Innovation must understand broad scale thinking and how to approach the project to allow for the highest probability of success.

How do I become one?²

Technical Leads must have a bachelor's degree or master's degree in Computer Science, Information systems or equivalent. They must have experience in designing and developing software systems. They will need excellent analytical and problem-solving skills. They may work for governments or large corporations. Having a strong background in math, and computers are essential to becoming a Technical Lead, as well as excellent writing and verbal communication.

In addition to a bachelor's degree, this position requires

- Typically, 8+ years of experience.

¹ Info Q, Technical Leadership: The Often Overlooked Skills and Responsibilities of a Technical Team Leader, on the internet <https://www.infoq.com/articles/technical-leadership-overseen/> (August 19,2019)

² Balfour Beatty, Innovation 2050—A digital Future for the Infrastructure Industry, On the internet <https://www.balfourbeatty.com/how-we-work/public-policy/innovation-2050-a-digital-future-for-the-infrastructure-industry/> (August 19, 2019)

It may be helpful to have the degrees, certificates, and/or coursework listed below.

- Master's degree
- Understanding of data structures and databases
- Knowledge of multiple computer operating systems
- Knowledge of computer network architecture

Salary Ranges*

Technical Analyst: \$55,000–\$80,000

Technical Lead: \$75,000–\$110,000 + Bonus

Technical Manager: \$100,000–\$150,000 + Bonus

Technical Director: \$135,000–\$200,000 + Bonus

*Salaries given are averages for Stanley Black & Decker. Salaries may vary between a state's urban, suburban, and rural districts and should be adjusted for cost of living.

Job Outlook

It is possible that by 2050, the new construction site will be human-free. Roads of the future will likely be smart roads designed to drive the next generations of vehicles. Automation will be a fundamental piece of our future Infrastructure⁴. These computer systems will need high-speed networks like 5G to operate remotely and a robust infrastructure to support them.