

Transportation Engineer

Design the roads, intersections, transit lines and traffic signals that a whole city depends on.

TYPICAL PAY

\$100,840

a year, full time

PAY RANGE

\$68k to \$163k

starting to experienced

TIME TO QUALIFY

4 to 8 years

after high school

DEMAND

Good

job outlook

LICENCE NEEDED

Yes

regulated job

WHERE YOU WORK

**State transportation departments,
city public works, consulting firms...**

How you get there

- 1 High school** Grades 11 and 12
Calculus, physics and chemistry. Engineering admissions look hard at math.
- 2 Bachelor's degree in civil engineering** 4 years
Take the transportation electives: traffic operations, highway geometric design, pavement, transportation planning. Pick a program accredited by ABET (the accreditor for engineering degree programs), because most state boards require it.
- 3 Pass the first exam** Final year
The FE (Fundamentals of Engineering) exam, normally taken in your last year of college. Passing it makes you an engineer in training.
- 4 Work under a licensed engineer** 4 years
Most states require about four years of engineering experience supervised by a licensed professional engineer before you can sit the second exam.
- 5 Pass the PE (Principles and Practice of Engineering) exam** After the experience
Civil engineers choose a depth area, and transportation is one of them. Pass it and your state board issues your license.

Pros and cons

- + Six figure median pay with a four year degree
- + Work that stays visible and in use for fifty years
- + Public agency jobs come with pensions and loan forgiveness
- Eight years and two hard exams before you are fully licensed
- Projects move slowly. Something you design may open in ten years
- Public meetings, politics and budget fights are part of the job

Optional boosts

Traffic operations and signals. Road safety. Transportation planning. Certifications from the Institute of Transportation Engineers.

Where these numbers come from

My Next Move: Civil Engineers
NCEES (National Council of Examiners for Engineering and Surveying): exams
Institute of Transportation Engineers
ABET, the accreditor for engineering degree programs

Numbers checked September 2026. Pay figures are typical full-time annual amounts in United States dollars, based on Bureau of Labor Statistics wage data and published pay scales. They vary by state, employer and experience. Tuition is for in-state students at public schools unless the card says otherwise. Sources, links and the click-through version: <https://career.help/us/careers/transportation-engineer>

Good to know

Traffic behaves like a fluid, until it does not

Traffic engineers model flow, density and speed with equations borrowed from fluid dynamics. It works until drivers behave like people: a phantom jam can travel backwards along a highway for mil...

Adding lanes often does not help

Widening a congested highway tends to attract more trips until it is congested again, an effect transportation researchers call induced demand. It is one of the main reasons modern transportation enginee...



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