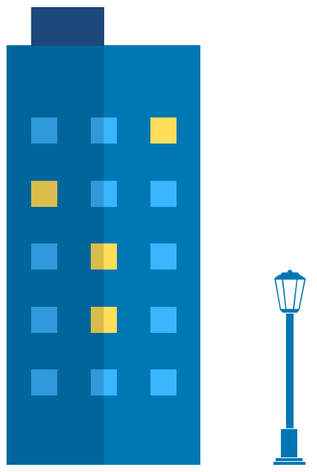
Infrastructure

What Is It?

The physical systems and structures that facilitate transportation, transmission, distribution, and storage for people, resources, energy, information, goods, and waste.



Why Is It Important?

People rely on infrastructure to connect them to goods and services, protect them from the environment, transport energy and waste, and to store information, energy, and goods. In short, infrastructure is all around us and enables modern life.

What Does It Cost?

From local councils to the federal government, infrastructure spending across the U.S. totals around $500 billion annually, which includes building, repairing, and maintaining infrastructure. Infrastructure investments often generate more value than they cost by connecting people and promoting commerce.

Space

Infrastructure is everywhere. You may not even notice it's there, like over 35 million miles of underground pipes, cables, and wires. Above ground, over 4 million miles of roadways connect to over 100 million commercial, industrial, and residential buildings which are powered by 6 million miles of electrical transmission and distribution lines.

Point		Counterpoint
• Infrastructure is of national importance, connecting and serving the entire population and economy.	⟷	○ Most infrastructure is locally or state-managed and outside the jurisdiction of the federal government.
• Resilient infrastructure takes into account temperature fluctuation, projected use and wear, and natural disasters in order to maximize the lifespan of infrastructure projects.	⟷	○ Many pieces of infrastructure across the U.S. are past their original lifespan, in poor condition, or even structurally deficient, such as roads and bridges.
• Critical new infrastructure is needed to accommodate growing populations, a changing economy, and transportation needs in the United States.	⟷	○ A combination of environmental, labor, regulatory, and zoning laws contribute to significant delays and costs in building new infrastructure.
• America's infrastructure built and enables the world's most dynamic economy and includes unmatched features like the Interstate Highway System and subsurface pipeline and utility network.	⟷	○ Infrastructure in the U.S. is rated C- by the American Society of Civil Engineers due to needed repairs and maintenance, outdated features, and investments required to bolster resilience for the future.

How Does It Work?

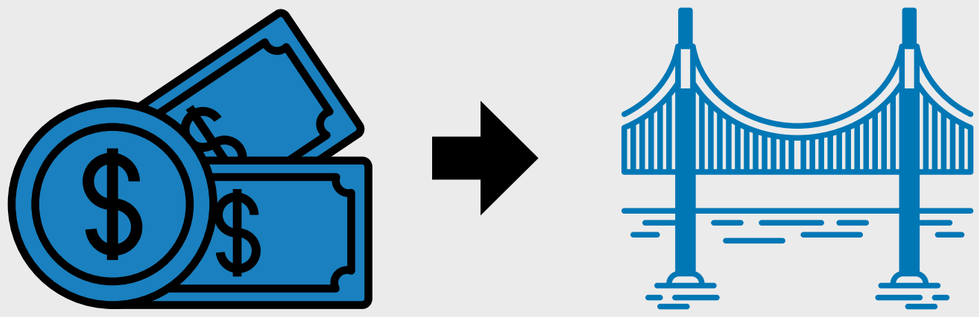
1. Infrastructure is generally considered a public good and is usually proposed or planned by a public local, state, or federal body.

2. The private sector and local governments fund 94 percent of all nondefense infrastructure in the U.S.

3. Companies bid on contracts with the government to build public infrastructure. Some infrastructure is built out by the private sector for services like utilities and internet, which consumers pay rates for service as well as for maintenance and upgrades.

4. Infrastructure is maintained through taxes, permits, and user fees, while a share is also provided from other federal government funds (taxes not directly related to the given infrastructure itself).

5. Some federal sources for infrastructure funding, such as the Highway Trust Fund, have become insolvent and require major reform to be effective.



Did You Know?

Only around three percent of infrastructure is federally owned. The remainder is owned or managed by state and local governments and the private sector.

What's Next?

Proposals to adapt infrastructure to a wider range of temperatures, usage, and stressors mean that future infrastructure will be more resilient and able to withstand both natural and man-made stress events.