

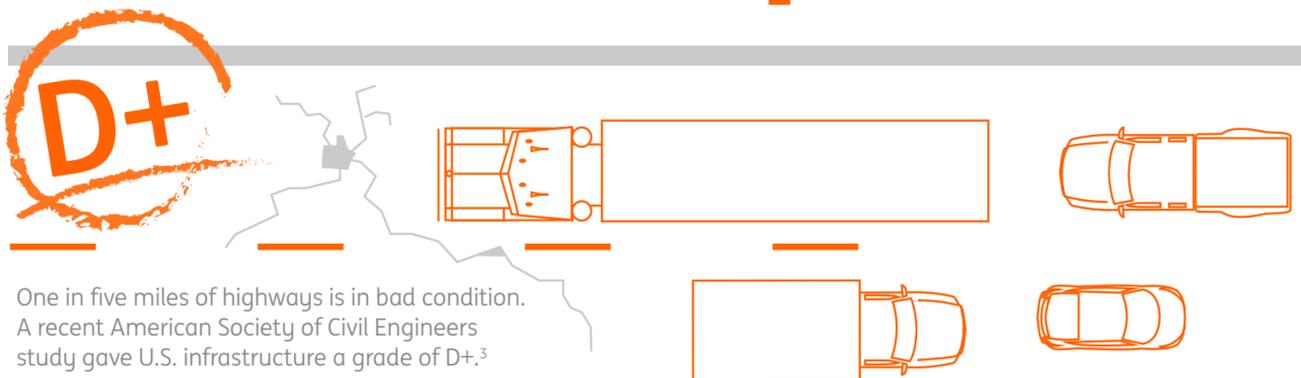
# Infrastructure challenges

Large infrastructure developments in the U.S. have left a rich legacy, but as many bridges, dams and roads reach the end of their life spans, local government are left with a major challenge.



## The challenge

The U.S. has a vast but aging infrastructure network. For example, the U.S. has **614,387** bridges.<sup>1</sup> Almost four in ten are over 50 years old.<sup>2</sup>



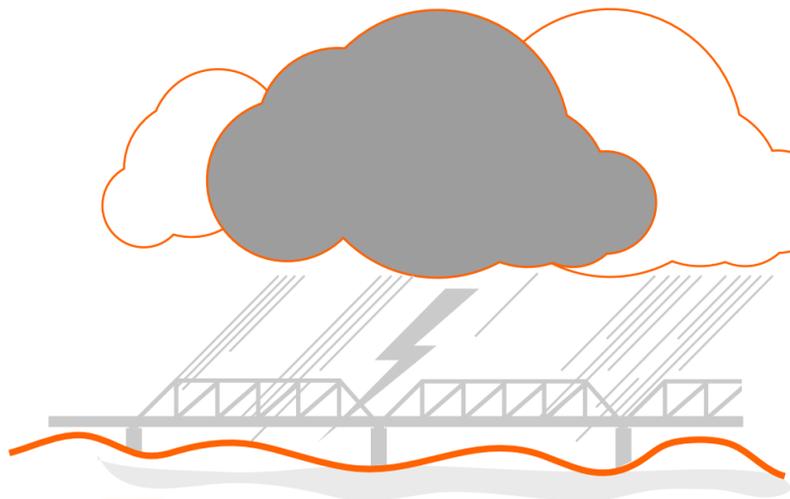
## D+

One in five miles of highways is in bad condition. A recent American Society of Civil Engineers study gave U.S. infrastructure a grade of D+.<sup>3</sup>

## The future

It's not just a case of repair or replace. The future demands and expectations of infrastructure are changing.

The increase in extreme weather events, storms, inland and coastal flooding will all mean extra pressure on infrastructure.



## Changing needs

How we use infrastructure is changing too. Animated smart roads, autonomous cars, cars-as-a-service and electric cars will all affect how we use and even pay for infrastructure.

## Funding

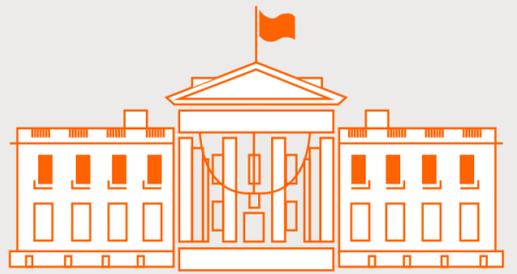
What does this mean for levels of investment? Some say the U.S. will need to spend up to \$4.6trillion in the next ten years to bring infrastructure up to a reasonable standard.<sup>4</sup>



# PPP

## Public Private Partnerships

Financing will be a challenge. To tackle it, it looks like the U.S. is set to embrace public-private partnerships. In President Trump's \$1 trillion infrastructure plan an estimated \$200 billion will come from federal funding with the remaining \$800 billion coming from private finance.



## Why PPP?

Public-private partnerships or P3s are commonly used in infrastructure financing globally, in Europe, UK, Canada, Australia and Latin America. The key word being "partnership", P3s are designed to transfer a large part of the risk and execution to the private sector. Private finance brings expertise and efficiency to infrastructure projects, which can expose the tax payers to vast cost over runs and years of delays if mismanaged.

Total infrastructure investment (\$m) 2012-2016<sup>5</sup>



### Sources

- 1: U.S. Department of Transportation: Deficient Bridges by Highway System 2016. December, 2016
- 2-3: ACSE: 2017 Infrastructure Report Card. April, 2017
- 4: CNN Money: Analyzing Trump's \$1 trillion infrastructure promise. March 2017
- 5: IJGlobal: Project procurement and delivery. May 2017

## Find out more

To find out about how ING is supporting infrastructure development in the Americas visit: [www.ingwb.com/americas](http://www.ingwb.com/americas)

