

Roman roads laid the foundation for modern-day prosperity, study claims

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Even though it is over 2,000 years since the ancient Roman road

networks were established, there are clear connections between the routes of the roads and modern-day prosperity. In a study in economics, the researchers investigate the importance of the Roman road network in maintaining or losing wealth through the centuries.

The Roman [road](#) networks were impressive constructions, which at their peak included 80,000 kilometers of road. They were built not primarily for economic reasons, but to transport troops to different parts of the empire. Little consideration was given to older road networks or to villages and communities along them. Nevertheless, the Roman roads soon began to be used for trade and transport, becoming links between emerging market towns and important for [economic development](#).

In the current study, the researchers investigate the importance of ancient Roman roads as channels for the transfer of wealth, to better understand why places that prospered 2,000 years ago tend to have greater [economic prosperity](#) even today.

Contributed to the concentration of cities

To carry out the study, the researchers superimposed maps of the Roman Empire's road network on top of modern satellite images showing the [light intensity](#) at night—one way of approximating [economic activity](#) in a [geographical area](#). They then divided the map into a fine-mesh grid, in each box measuring the presence of Roman roads and comparing it with the infrastructure, population density and economic activity of today.

"Given that much has happened since, much should have been adapted to modern circumstances. But it is striking that our main result is that the Roman roads have contributed to the concentration of cities and economic activity along them, even though they are gone and covered by new roads," says Ola Olsson, professor of economics at the School of Business, Economics and Law at the University of Gothenburg, and one

of the authors of the study.

An important question in the study concerns cause and effect, that is whether the Romans built the roads in areas with strong economic activity or whether it was the roads that gave rise to economic growth.

"That is the big challenge in this entire field of research. What makes this study extra interesting is that the roads themselves have disappeared and that the chaos in Western Europe after the fall of the Roman Empire would have been an opportunity to reorient the economic structures. Despite that, the urban pattern remained," says Ola Olsson.

Worse development in the eastern parts

Another factor that supports the study's findings is what happened in the eastern parts of the Roman Empire, in North Africa and the Middle East, where wheeled transport was basically abandoned in the 4th–6th centuries to be replaced with camel caravans. The roads in the region were used less and less and were allowed to fall into disrepair. Thus, in contrast to the western parts of the kingdom, new roads were not built on top of the old ones.

"The roads became irrelevant and thus we don't see the same continuity in prosperity at all. It can be said that the area was affected by what is called a 'reversal of fortune'—countries that early on developed civilization, such as Iraq, Iran and Turkey, are today autocratic and have significantly worse economic development than countries that were then in the economic periphery," says Ola Olsson.

How investments in infrastructure can have major economic consequences both decades and centuries after they were made is significant for understanding why some regions are more developed than others, says Ola Olsson, but the results may also be important as a

background for modern day political infrastructure decisions.

"In Sweden, for example, we are talking about possibly building new railroad trunk lines. The former, from the 19th century, gained enormous importance for economic activity in Sweden. New stretches for the railroad are discussed, and if they are built you can expect some communities to get a big economic boost."

The research was published in the *Journal of Comparative Economics*.

More information: Carl-Johan Dalgaard et al, Roman roads to prosperity: Persistence and non-persistence of public infrastructure, *Journal of Comparative Economics* (2022). [DOI: 10.1016/j.jce.2022.05.003](https://doi.org/10.1016/j.jce.2022.05.003)

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