



By: Tomorrow's Affairs Staff

How AI infrastructure slows road and bridge construction



In recent months, public discussions about artificial intelligence have focused on two main themes: spectacular technological advances and fears of job losses.

Almost no one mentions a third, much more mundane consequence of the AI revolution – the fact that countries' physical infrastructure is beginning to bear the cost of **digital expansion**.

This is not a metaphor but a very real effect: delays in the construction of roads, bridges, waterworks and other essential public systems.

Two types of capital that have rarely intersected are now coming into conflict in the United States and increasingly in Europe.

On one side are public infrastructure projects, funded by budgets and municipal and state bonds, and often planned years in advance.

On the other are the private, highly aggressive investment cycles of large technology companies building vast data centres – physical facilities essential for AI systems to operate.

The impact is clear: the same construction workers, companies, and equipment are now being used for data centres instead of roads, bridges, and other public projects. Only now is this emerging problem beginning to manifest itself.

When data centres rival public works

According to data from the **U.S. Census Bureau**, private spending on data centre construction in 2025 reached an annual level of more than \$41 billion.

This amount is almost equal to the total allocations by federal states and local governments for transport infrastructure, including roads and bridges.

In other words, the private sector building digital infrastructure now spends as much as the government does on the physical infrastructure that keeps society functioning each day.

The construction industry in the US, as well as much of the developed world, is grappling with a persistent labour shortage

On paper, this may appear to be a sign of a healthy investment cycle. In practice, however, it means that the same pool of resources – construction workers, engineers, subcontractors, cranes, concrete, steel – is being pulled in completely different directions.

The construction industry in the US, as well as much of the developed world, is grappling with a persistent **labour shortage**.

The demographic trends are clear: many experienced workers are retiring, while younger generations are not entering craft and technical professions in sufficient numbers.

This is compounded by more restrictive **immigration policies**, which further reduce the availability of workers in sectors that have depended on migrant labour for decades.

Private tech spending slows public works

In these circumstances, the mass construction of data centres has a clear and very practical advantage over public infrastructure projects.

Private technology companies have capital that can be deployed immediately. They can offer higher wages, conclude multi-year contracts without hesitation, and hire complete construction crews at short notice.

The state does not have this flexibility. Public investments must go through public procurement, annual or multi-year budgets, and political decisions that slow down any

change of plan.

Therefore, workers, companies, and equipment naturally go where the work is faster, safer, and better paid, while public projects are left waiting.

There are not enough people or capacity to carry out all the projects simultaneously

The result is predictable. Bridge reconstruction projects are postponed. The construction of local roads is delayed. Planned works on water supply and energy networks are deferred to future budget years.

This is not because there is no money – there is, and in sufficient quantities – but because there are not enough people or capacity to carry out all the projects simultaneously.

This is not a theoretical assumption but an open acknowledgement from the sector itself.

The CEO of Autodesk, one of the key firms whose software is used by most of the construction industry, recently stated that there is no doubt **data centre construction** is "sucking" resources from other infrastructure projects and that many public works will progress more slowly than currently expected.

It is a cold assessment from someone with insight into real market trends, not a political or ideological criticism.

Delayed infrastructure, higher fiscal costs

It is particularly concerning that this process is occurring at a time when public authorities are already heavily indebted, specifically to finance infrastructure.

State and local governments in the US have issued a record amount of bonds for two consecutive years, with projections for the coming year indicating an additional \$600

billion in new debt.

Most of these funds are allocated to roads, bridges, and public systems. If these projects are delayed or become more expensive due to labour shortages, the **fiscal pressure** will increase in two ways: both interest and delay costs will be incurred.

If physical infrastructure weakens, so does the foundation supporting the growth of artificial intelligence

This brings us to a broader, often overlooked aspect of the problem. Data centres rely on traditional infrastructure. They consume large amounts of **electricity and water** and can only operate if networks are stable and reliable.

If investment in roads, electricity distribution, water supply, and other essential systems slows or is delayed, the consequences will eventually affect the digital sector as well.

In other words, if physical infrastructure weakens, so does the foundation supporting the growth of artificial intelligence.

Data centres test Europe's capacity

For **Europe**, this issue may be even more sensitive. Unlike the US, European countries have stricter budget rules, slower procedures, and less flexible labour markets.

If a similar wave of data centre investment reaches Europe – and it is already beginning to do so – the competition for resources will become even more intense.

In this context, the question is not whether Europe wants AI, but whether it is institutionally prepared to build both digital and physical infrastructure simultaneously without undermining either.

States must decide what takes priority when both projects claim to be "strategic"

A new line of political and economic conflict is already emerging. Local governments are starting to impose conditions on data centres, from local employment requirements to restrictions on energy and water consumption.

Technology companies, meanwhile, seek speed, stability, and minimal obstacles. Between them stands the state, which must decide what takes priority when both projects claim to be "strategic".

AI expansion and the limits of infrastructure

What makes this topic particularly important is that it is not a passing phenomenon. The AI infrastructure cycle is only just beginning.



The data centres being built today are intended to operate for decades

The data centres being built today are intended to operate for decades. At the same time, much of the physical infrastructure in developed countries is already old, often neglected, and urgently requires modernisation. These two processes will increasingly come into conflict.

Therefore, it is crucial to change the perspective from which AI expansion is considered – not as purely a technological or financial issue, but as a profound infrastructural and social challenge.

Who builds, who works, who waits, and who pays the price for speed? Without this understanding, public debate will remain mired in superficial stories about algorithms, while real problems fester beneath unrepaired roads and bridges awaiting reconstruction.

The core problem of the AI era is not software control, but whether states can simultaneously maintain and develop essential infrastructure.

If this relationship is not clearly defined, the growth of the digital sector may coincide with the deterioration of roads, energy networks, and other systems on which the daily functioning of society depends.