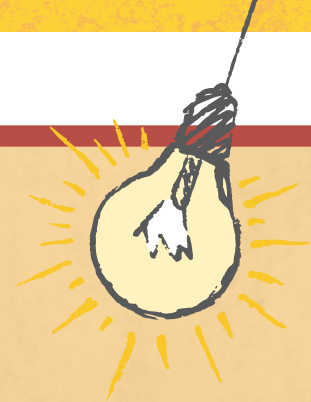


MEASURING THE IMPACT OF HIGHWAY UPGRADING ON NATIONAL INTEGRATION



Will improved transport infrastructure help local economic development in Tunisia's interior regions?

Tunisia Highway Upgrading Project

SECTOR:

Transport Corridors

LOCATION:

Centre West to Greater Tunis

IMPLEMENTING AGENCY:

Government of Tunisia

TIMELINE:

2019–2021

TOTAL FINANCING:

USD 200 M.

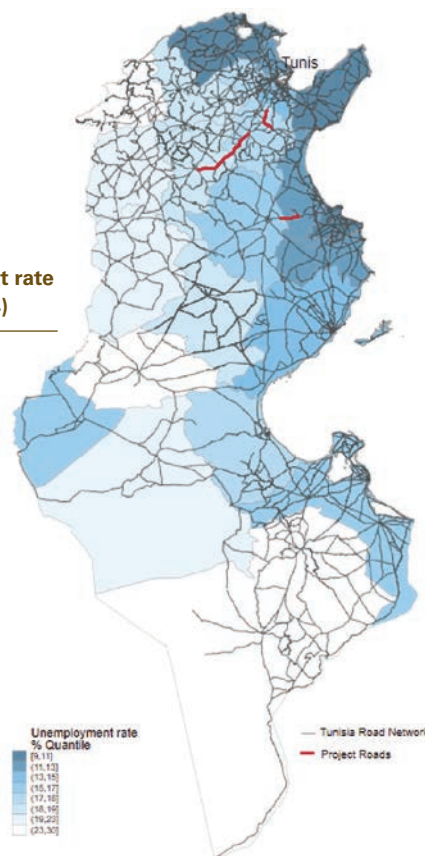
COMPONENTS:

Upgrade of 3 corridors from one-by-one lane roads to two-by-two lanes allowing speed limit to increase from 70 to 90km/hr

Context

Some of Tunisia's interior regions lag economically behind and remain poorly connected with the major economic centers in its coastline. The three largest cities, Tunis, Sfax, and Sousse are all located on the eastern coast and are home to the country's major ports. They account for 85 percent of national GDP and have relatively lower unemployment rates than the interior regions.

Unemployment rate in Tunisia (2014)



Source: Census 2014, Institut National de la statistique & MEHAT

An assessment by the Ministry of Transport identified poor traffic conditions on the roads to and from Tunis, with high levels of degradation on important trade corridors. To address this issue, the Government of Tunisia is working to improve the connections between the coastal economic hubs and the lagging interior regions. These upgrades seek to reduce travel times, improve road safety, and enable the access of interior regions to the main economic centers and international ports.

DIME is collaborating with the Government of Tunisia to design an impact evaluation (IE) of a road improvement project to measure the impact of road capacity expansion. Specifically, this project upgrades the lane capacity over 146km of three roads, enabling the speed limit to increase from 70 to 90 km per hour. The three road segments connect the Center West to the greater Tunis area.

Impact Evaluation Research

The impact evaluation will focus on identifying the effect of the road upgrades on economic activity, job creation, and road safety outcomes. The team will use a difference-in-difference analysis that compares how much upgraded roads improve over time in comparison to roads that were not upgraded. This removes from our analysis any improvement that would have happened regardless, allowing us to isolate the specific impact of the road's lane capacity upgrade.

The analysis is based on primary datasets drawn from multiple secondary sources. These datasets are drawn from participating Tunisian government agencies who have agreed to collaborate in sharing data. Satellite imagery data is also used to construct measures of activity that may not be regularly or reliably collected along the transport corridors. For example, the team will measure light intensity to give an approximation of economic activity. Additionally, the IE will use firms' registries from administrative data compiled by the National Statistics Institute to measure job creation.

Policy Relevance

This impact evaluation contributes to the understanding on the impact of road capacity expansion on local economic activity. While larger projects have been shown to be transformative, the extent of the usefulness of smaller upgrades is less studied. An impact evaluation is key to determine whether road upgrades in fact contribute to inland areas' economic welfare. This IE may therefore influence how Tunisia and other countries with an unequal spread of economic activity conduct road upgrades and whether they scale them up or down.

For more information email dimetransport@worldbank.org or visit www.worldbank.org/en/research/dime/brief/transport



The ieConnect for Impact program links project teams with researchers to develop rigorous and innovative impact evaluations that both substantially improve the evidence-base for policy making and induce global shifts in transport policy. The ieConnect program is a collaboration between the World Bank's Development Impact Evaluation (DIME) group and the Transport Global Practice. This program is part of the Impact Evaluation to Development Impact (i2i) multi-donor trust fund and is funded with UK aid from the UK government and by the European Union.