



الصندوق الائتماني متعدد
المانحين للنمو في الأردن
JORDAN GROWTH MULTI DONOR TRUST FUND



وحدة دعم تنفيذ
الإصلاحات الاقتصادية
REFORM SECRETARIAT

PAVING THE WAY FOR DATA-DRIVEN ROAD ASSET MANAGEMENT

Jordan's national road network, covering 8,661 kilometers of primary, secondary, and tertiary roads under the responsibility of the Ministry of Public Works and Housing (MoPWH), plays a crucial role in economic growth and regional connectivity. In the 2019 Global Competitiveness Report, Jordan ranked 17th globally in infrastructure, reflecting significant improvements in road quality, transport services, and utility infrastructure since 2010, when the country ranked 35th.

However, the road network has faced challenges due to reactive maintenance practices, leading to higher costs, frequent emergency repairs, and unsafe road conditions. Key challenges include:

- Only **0.25%** of Jordan's GDP is spent on road maintenance, well below the **1-3%** benchmark for developed countries.
- **36%** of secondary and **60%** of tertiary roads are in poor condition.

- **5%** of roads contribute to **41%** of fatal accidents.
- Vulnerability to climate change, with extreme weather damaging roads, impacting economic activity, and increasing repair costs.

In response, Jordan is transforming its road infrastructure management through the development of a Road Asset Management System (RAMS), supported by the Jordan Growth MDTF. RAMS is a data-driven system that will optimize road maintenance, transition from reactive to proactive planning, and enhance road safety and cost efficiency. By integrating data collection of the national road network.

As Jordan's infrastructure modernization efforts align with the Economic Modernization Vision and the Reform Matrix, RAMS will contribute significantly to economic development, safety, and sustainability.



The Ministry of Public Works and Housing plays a critical role in modernizing Jordan's infrastructure, believing that advanced infrastructure is key to economic growth, attracting foreign and local investments, and improving the livelihoods of Jordanians. This is at the heart of the country's development goals.



H.E. Eng. Maher Abu Al Samen, Minister of Public Works and Housing

KEY ACHIEVEMENTS TO DATE

- ✳ Establishing a dedicated Road Asset Management System Unit at MoPWH in 2024.
- ✳ Successfully collecting comprehensive data for 10,000 kilometers of roads using Artificial Intelligence (AI) technologies.
- ✳ Prioritizing and integrating around 2,000 kilometers into the initial rollout of RAMS to form the core database for proactive planning and maintenance.
- ✳ In October 2024, MoPWH staff received intensive training on pavement assessment, predictive maintenance, and using GIS and HDM-4 to implement RAMS.



WHY IT MATTERS

RAMS is a strategic tool for the sustainability of Jordan's road infrastructure. By enabling real-time monitoring and data-driven decision-making, it ensures timely interventions that lead to cost-effective maintenance, improved safety, and better resource allocation. This shift toward proactive management will help Jordan ensure safer roads and more sustainable infrastructure.

EXPECTED IMPACT

- Better maintenance of roads by assisting the Ministry in monitoring road conditions, making plans, and minimizing emergency repairs, saving resources, time, and money.
- Jordan's first national road maintenance policy was initiated, providing a systematic and transparent approach to budgeting and planning.

- Improved access and connectivity in both rural and urban areas.
- More transparency and public trust, through real-time dashboards and regular reporting that keep everyone informed.
- Promoting greener infrastructure planning by incorporating environmental and social constraints early in the process.
- Schedule maintenance work efficiently and avoid waste.
- Stronger coordination among engineers, planners, and policymakers through one shared system.
- Enhanced responsiveness to local needs.



LOOKING AHEAD

Once fully operational, RAMS will be a cornerstone of Jordan's road management, driving a safer, more resilient, and cost-efficient road network. This initiative aligns with Jordan's commitment to sustainable growth, institutional strengthening, and evidence-based policymaking.

The development of RAMS is being made possible through continued technical assistance provided through the Jordan Growth Multi-Donor Trust Fund (MDTF), with generous contributions from the United Kingdom's Foreign, Commonwealth and Development Office, Canada, Germany, Norway, and the Netherlands, in close collaboration with the World Bank.

This ongoing support is pivotal to advancing the RAMS reform, which is currently underway and marks a significant step toward modernizing Jordan's road infrastructure. The reform reflects a shared commitment to strengthening road asset management and promoting long-term sustainability. These contributions are enabling Jordan to lay the groundwork for a resilient, efficient, and future-ready road