

Calibration of Dubai's Strategic Transport Model



Image source: unsplash, I. Castiello d'Antonio

The Emirate of Dubai owns and manages a travel demand model – the Dubai Strategic Transport Model (DSTM). This macroscopic model provides forecasts of transport demand based on population and land use scenarios, planned road and public transport supply, and future transport policies. The objective of this project has been to update the model and calibrate it for the new base year 2023, all with while implementing an enhanced model architecture. The new model is applied under the framework of Dubai's Strategic Transportation Plan 2040.

Services Provided by MOVENTES:

- Processing of travel behavior surveys (resident population, visitor population, external and airport demand)
- Development of model parameters for the tour-based demand model based on the surveys
- Implementation of an enhanced demand model architecture in Visum, including nested mode choice, several population segments, long travel tours including up to five out-of-home activities)
- Calibration of all input data and parameters of the demand models
- Supervision and instruction of junior experts in the team
- Contributions to the reports

Contracting Entity

Government of Dubai,
Road & Transport Authority (RTA)

Lead Contractors

Zutari Engineering International Pty Ltd,
PTV Group MENA Region

Project Duration

2024-2025

Country

United Arab Emirates, Emirate of Dubai

Contact

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