

# ***ITS Monterrey-Salttillo Highway***

## **(ROADIS)**

Autopista Monterrey-Salttillo is a toll road concession operated by Concesionaria Autopista Monterrey Salttillo (CAMS), which in turn is a ROADIS company.

The highway is located in northern Mexico and connects the states of Nuevo Leon and Coahuila. It has a length of 95 km and is separated into two operational sections: the Monterrey-Salttillo highway and the Libramiento Norponiente de Saltillo.

It serves as one of the major hubs for connecting cargo traffic entering through the USA-Nuevo León border.

### **Innovative solutions contribute to a healthy world without congestion!**

In 2018, Kapsch installed EcoTrafiX as the ITS management and operation system, replacing Indra's Horus platform.

In 2020, CAMS initiated a process of renewing the field equipment and the management platform to adapt to the new needs of the concession.

Project highlights:

- First project in Mexico to implement WIM type A5 stations
- Integration of the weighing platform into the management platform
- Creation of response plans based on low visibility conditions
- Integration of PMV Full Matrix in the NTCIP protocol
- Implementation of the management platform in HTML5
- Creation of reports focused on the specific needs of the Concessionaire



## Project Scope:

The project implemented by Kapsch included the renewal of the ITS equipment that Roadis had previously installed, as well as the installation of new systems that complement the functionality and operability of the highway's ITS platform.

Kapsch worked together with the Concessionaire to design and adapt the project to maximize the functionality and make the distribution of equipment along the highway more efficient.

The following equipment and work have been installed:

- EcoTrafiX platform upgrade to version 3.3
- 26 Full Matrix, Full Color Variable Message Panels
- 6 speed cameras with configurable instantaneous display panel
- 2 Dynamic Weighing Stations category A5 (+-5% accuracy)
- 6 thermal cameras in low visibility fog locations
- 36 HD PTZ cameras with infrared illuminators
- 4 Visibilimeters for foggy areas
- 12 Monumental tariffs for toll plazas
- Civil works for the adequacy of areas to install the equipment
- Electrical works for equipment power supply
- Supply of solar power equipment for some devices

## The Challenges:

- Initiating the project during the pandemic posed a challenge in terms of allocation of personnel and material resources to meet the project schedule.

## The Solution:

Our EcoTrafiX as the highway's ITS management and operation system, to replace Indra's Horus platform.

EcoTrafiX 3.3 brings up new tools and features that elevate the possibilities in areas of equipment control, plan configuration and reporting flexibility. It includes new functions that enhance the user experience and adds technical enhancements to the system focused on data management and sharing.



## The Added Value

*A visible drop in the number of serious accidents since ITS implementation began. Even in the year of 2022 and with the end of the pandemic, while traffic flow increased again, the number of serious accidents on the highway continued to fall, according to data from the Concessionaire.*