

# Mitigating Route Planners' Impact

## Problem

Highway construction projects typically go hand in hand with speed reductions, increased congestion etc. which, thanks to route planners, often lead to congestion on secondary roads, rather than shorter travel times.

## Solution

The present solution, in the context of the *ASTRA bridge* project, pro-actively informs motorists about the true impact of attempts to *beat the traffic* via secondary roads. The solution consists of traffic measurement points, variable message signs, and an exit-ramp metering system:

- Autonomous traffic measurement points on the highway, equally spaced at 1 km intervals, and in dedicated queue zones, acquire and transmit up-to-date traffic and queue/no-queue information
- Variable message signs (VMS): Display *current* extra travel time on highway and secondary road (vs. *historic* travel time, measured *after* vehicles have passed)
- Exit-ramp metering: Exit ramps are metered, the meter can be overridden when the dedicated queue zone is at capacity
- Traffic management controller to process inputs and determine variable message signs



## At A Glance

### Industry

Logistics - Traffic Management:  
Traffic Data Acquisition

### Location

Switzerland Highway A1 between  
Kirchberg and Luterbach

### Challenges

Reliable traffic data acquisition and transmission for timely and accurate travel time calculation and ramp metering with override

### Solution

Installation of twelve traffic measurement points with solar-powered option

### Result

Up-to-date travel time information thanks to accurate, reliable and maintenance-free traffic data acquisition with automatic ramp meter override feature

## Partner

tribus AG

## Principal

FEDRO (Swiss Federal Roads Office)

