

PED CROSSING AT TRAM STOP (VAP)

Short description

Pedestrian crossing in combination with a median tram stop including jaywalking pedestrians to reach their tram.

Requirements

- ▶ PTV Vissim Module: VAP
- ▶ License with maximum number of pedestrians > 30

Objective

At a signalized crosswalk many pedestrians obey the signals, but eventually ignore red lights if a tram is approaching that they do not want to miss. Others obey a red signal always and might miss their tram.

This situation is not ideal. The high motivation to ignore the traffic light “overwrites” the principally existing will to obey them. Additionally the time pressure which exists in this situation may have a negative impact of the usual degree of care. Hence there is a serious safety aspect linked with this behavior and situation.

Modelling technique

The behavior of pedestrians is modeled using the pedestrian class concept and VAP (detector controlled signals):

- ▶ Pedestrians who always obey the red light yield to a fixed time controlled signal („signal A“).
- ▶ Pedestrians who obey the red light unless their tram is approaching obey a signal which is linked to signal A. If a tram is approaching, the link to signal A is temporarily suspended in favor of green light. A conflict area on the crosswalk prevents pedestrians from stepping onto the road, even if they ignore the red signal A.

As there are trams approaching from both directions two such signals are necessary.