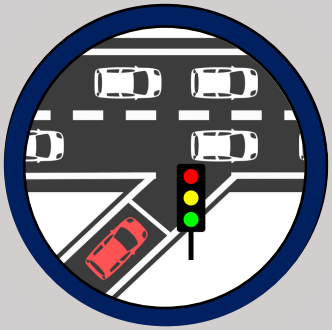
Ramp Metering



On a freeway in Minnesota, **vehicle delays were reduced** by an average of **48 percent.**

Source: MnDOT (2015)

In Florida, a system using ramp metering **reduced odds of crashes by 6 percent.**

Source: Transportation Research Board (2017)

Ramp meters are traffic signals installed on freeway on-ramps that regulate the frequency at which vehicles enter the flow of traffic. They reduce overall congestion by managing the amount of traffic entering the freeway and by breaking up platoons that make it difficult to merge onto the freeway. (FHWA-OPS)

Ramp Metering Goals

Ramp metering implementation is flexible, so implementation strategies should be aligned to regional transportation objectives. Objectives might include decreasing freeway crashes or increasing average speeds. (FHWA-OPS)

Ramp Metering Facts

(FHWA-OPS)

- By smoothing out flow of traffic, ramp metering also has environmental benefits in the form of fuel savings.
- Some agencies have installed bypass lanes for high-occupancy vehicles to skip the queue.

Source: USDOT

Highlighted ITS Benefits

Visit ITS Benefits Database: www.itskrs.its.dot.gov/benefits