What are the benefits of on-ramp signals?

- Cost-effective transportation improvement
- Reduced/more reliable travel times (less variation day-to-day)
- Reduced vehicle emissions and fuel consumption
- Smoother merging maneuvers enhance safety

Will traffic back up on the ramps?

The ramp signal system responds to real-time traffic conditions to balance traffic flow. If vehicles start to back up on the ramp, the signal will be adjusted to quickly clear the backup. Cameras will also be installed to monitor conditions remotely in the Traffic Operations Center.

Will the on-ramp signals operate all the time?

No. The on-ramp signals are generally activated only when westbound I-540 traffic experiences frequent congestion (i.e., morning weekday peak period). However, the on-ramp signals can be activated at any time in response to special circumstances that affect traffic flow such as special events, an accident, or construction.

Do I have to obey the on-ramp signal?

Motorists should treat the on-ramp signal like any other traffic signal.



RAMP METERED WHEN FLASHING

On-Ramp Signals for Congestion Relief

On-ramp signals, also known as ramp meters, are coming to I-540 westbound at:

- Falls of Neuse Road (Exit 14)
- Six Forks Road (Exit 11)
- Creedmoor Road (Exit 9)
- Leesville Road (Exit 7)

RAPIMENT OF TRANSPORTE

RAMP METER AHEAD

I-540 On-Ramp Signal Project



www.ncdot.gov/contact/question/general/ www.ncdot.gov/projects/onrampsignals/

What is an on-ramp signal?

On-ramp signals (or ramp meters) are stop-and-go signals that regulate the flow of traffic entering the freeway in order to manage freeway congestion and reduce overall delay.

How do on-ramp signals work?

When activated during congested periods, vehicles on the ramp will stop and wait until the on-ramp signal turns green to release them onto the freeway. Only one vehicle is released on each green light, creating a gap between vehicles entering the freeway. This causes less disruption to traffic on the freeway, allowing for increased travel speeds and reduced travel time on the freeway.



An on-ramp signal on I-75 South in Atlanta, Georgia

Where will the on-ramp signals be located? And when?

NCDOT completed a feasibility study and additional indepth operational and financial analysis in 2013. Based on results, four westbound on-ramps to I-540 were selected as pilot on-ramp signal sites. The on-ramp signal sites are anticipated to be operational in spring 2017, with construction beginning in late 2016.

Proposed On-Ramp Signal Locations



Freeway with On-Ramp Signals

