

## Dynamic Left Turn intersection (DLTi) - FAQs

### What is the purpose of a Dynamic Left Turn intersection (DLTi)?

Many intersections have two left turn lanes to handle rush hour traffic. A DLTi is a simple treatment to make the intersection operate more efficiently for the majority of the day when only one left turn lane is needed.

### How does a Dynamic Left Turn intersection work?

A DLTi uses overhead lane signals to close the rightmost left turn lane during lower volume periods. This enables a flashing yellow arrow to display for the remaining, single left turn lane, which reduces off-peak delays for travelers.

### How does a flashing yellow arrow reduce intersection delays for everyone?

A flashing yellow arrow makes any intersection function more efficiently, by reducing cycle lengths and delays:

- Left turning vehicles do not have to wait for a green arrow to turn
- Other approaches do not have to wait while a dedicated green arrow is shown to as few as a single vehicle

### Wouldn't it be better to retain access to both left turn lanes at all times?

At most locations with two left turn lanes, a flashing yellow will not be shown, and travelers can turn left only with green arrows. This increases cycle time and delay for those times of day when only one left turn lane is needed.

### Couldn't NCDOT use flashing yellow arrows for both left turn lanes?

While NCDOT does use flashing yellow arrows for both left turn lanes at a few locations, most intersections are more suitable for flashing yellow arrow only for the leftmost left turn lane which has better sight distance.

### How will I know if a left turn lane is open or closed at a DLTi?

The leftmost left turn lane will always be open. During peak periods the rightmost left turn lane will open with an overhead white left-turn arrow. During off-peak, the rightmost left turn lane closes with an overhead red "X".

### Is a Dynamic Left Turn intersection a new idea?

All of the elements at a DLTi location are familiar to motorists – dual left turn lanes, lane use signals, and flashing yellow arrows. *The DLTi combines familiar intersection elements in a new way to reduce delay throughout the day.*

### Will the DLTi concept work?

We know that incorporating a flashing yellow arrow will make any intersection operate more efficiently and save travelers time. We will learn how travelers respond to the DLTi pilots this spring in Cary and Clayton.

