

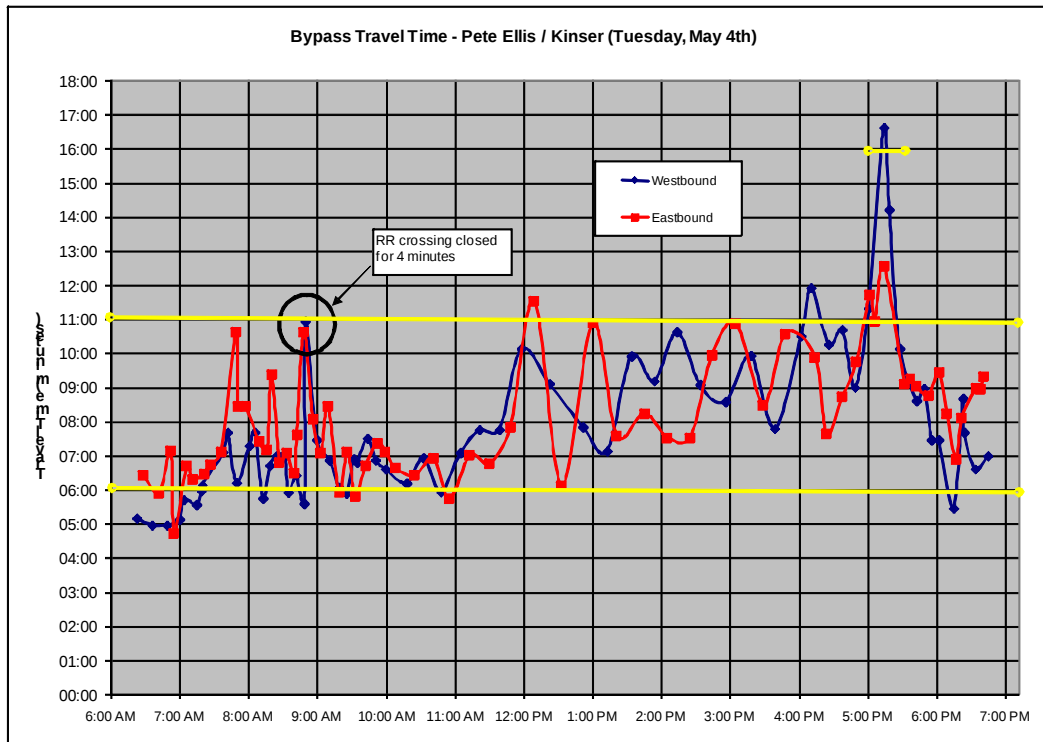
Time Study

It is common for people to claim that it takes 30 minutes or more to traverse the bypass at certain congested times of the day. It certainly looks congested much of the day. So a handful of volunteers – including members of B-TOP and residents from surrounding neighborhoods – decided to test out the actual travel time.

On Tuesday, May 4th, a travel time study was performed on the 3.2 mile length of the 45/46 Bypass widening project between Pete Ellis and Kinser Pike. Beginning at 6:15am and going to 6:45pm, as many as 3 vehicles at peak hours drove this length back and forth, timing the gaps between each intersection to determine the actual time variations caused by congestion. IU and the local school system (MCCSC) were still in session. It was Election Day (primary), but turnout was extremely low. It is unknown what effect this had.

Procedure

There were 3 cars in the morning peak hours and 3 cars in the evening peak hours, and a single car driving in the off-peak hours. Over this 12 ½ hour period, 65 trips were timed eastbound and 65 trips westbound. Below are the overall travel time results.¹



¹ This time includes the stop time at the Pete Ellis and Kinser Pike intersections, so westbound the time started at Kingston (a 20 second travel time to Pete Ellis), and eastbound the time started 20 seconds before getting to Kinser Pike.

Results

When there is virtually no traffic and the lights are green, the travel time is between 5 and 6 minutes. All day the travel times average around 9 minutes with only rare peaks going to 11 minutes at standard commute and lunch times. Only for a very brief time at about 5:15pm is there a single spike where the travel time is 16 ½ minutes, and that is only in the westbound direction; the eastbound time peaks at only 12 ½ minutes at this same time of day.

Popular perceptions of road delay are often quite exaggerated from reality.

There were numerous observations that the study team made while driving that are worth noting.

- There are numerous walkers, bikers and joggers that ride along the bypass, obviously feeling that the wide shoulders provide a sufficient buffer for safety.
- The traffic lights are well timed and allow the queues to empty in all but the absolute peaks.
- The westbound peak travel time is not due to the Dunn and Fee lights as many have theorized; it is due to two things:
 - So many left-turning vehicles northbound on Walnut to westbound on the bypass causing long Walnut green times, and reducing the percent green on the bypass.
 - Insufficient queuing area on the bypass at Walnut, causing the queue to back up past Fee Lane.

The question is: how will these travel times change as a result of widening the road? These delays are not caused by the road being too narrow or the inability to pass slow drivers, but because of the need to accommodate cross traffic (mostly at Walnut). Upon widening, cross traffic will still exist and two new intersections at 7th and 14th are planned that may need signals. 17th St will need a light for safe and efficient left turns. Dunn and Fee, which currently have no left-turn arrows, will need them for safe turns. Although additional turn lanes are being placed at busy intersections, the additional signals will slow travel time.

The spike at 5:15pm represents the only time of day when bypass traffic exceeds the road's capacity. Even so, the longest travel time is only 7 ½ minutes greater than the average travel time. According to bypass traffic counts, the hour between 5:00pm and 6:00pm represents 8% of daily traffic. By 5:30pm traffic had thinned and travel times returned to only 1 minute greater than the average. Only the 4% of daily users who are traveling between 5:00pm and 5:30pm could stand to see any possible improvement from increased road capacity, and they will save at most 7 ½ minutes. Many users will see increased travel times as they grapple with left turns across a greater number of travel lanes as well as the effect of additional intersections.