

17. ADDITIONAL DESIGN CONSIDERATIONS

Roadway Diet refers to reducing the number of travel lanes on a given roadway. In the case of Dixie Highway, this would mean restriping the existing four narrow lanes into three wider lanes. The intention is to improve safety and traffic flow by moving left-turning vehicles out of the way of traffic. This approach does not require any additional frontage and adds a left turn lane that may reduce congestion.

Road diet has been applied to a roadway in Lexington where pavement marking configuration was changed from four lanes to three lanes. This resulted in the center lane being used as a two-way left turn lane and the remaining lanes used for through and right turn traffic. The roadway capacity remained approximately the same on this roadway following these changes.



A road diet was publicized as a potential option for Dixie Highway prior to the public meetings. Comments were received both favoring and opposing this approach. Both groups agreed that the absence of left turn lanes was a critical problem.

This concept was considered for Dixie Highway and it was concluded that a Road Diet would not be advisable at this time. There are several factors that led to this conclusion including but not necessarily limited to the following.

- The reduction in the number of traffic lanes from four to three would greatly improve the left turn problem at access points as well as the intersections
- However, it would require all through and right turn traffic to use the curb lanes. This would reduce the storage space on Dixie Highway which is highly undesirable during those periods of time when traffic is using Dixie Highway as an alternate route for I-71/75. It is important that as much storage be maintained on Dixie Highway as possible during these periods. Additionally, having only one lane available for through and right turn traffic would reduce the gaps in traffic thus making it more difficult to enter and exit the many entry points along the corridor
- The volume of traffic is an important consideration in this scheme. While there are some disagreements by professionals on the maximum and most desirable volumes of traffic to be considered for these changes, all agree that volume is an important factor. Traffic counts show average daily traffic volumes on Dixie Highway as high as 25,000 on certain segments of the corridor with no added traffic from an I-71/75 diversion. This volume would not work well with the lane reductions

Roundabouts are used in place of traffic signals. They require a circular movement around a circular center island. The circles require greater diameters in response to greater speeds and traffic volumes. Traffic circles can be more efficient than traffic signals and their construction may allow for the removal of driveways close to the intersection.

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- The outside diameter of a roundabout for a roadway such as Dixie Highway is several hundred feet, To provide this area would require the purchase of properties on all four corners which would be very costly and highly disruptive to the business community.
- Roundabouts generally require added roadway maintenance (related to the treatment of the center island).
- The roundabout is intended to function without the use of traffic signals. Therefore pedestrian crossings are provided with signs and markings only. Most traffic signals in operation today have a potential conflict between pedestrians and turning traffic. With the roundabout, the pedestrian has a potential conflict with what would be considered all traffic at a conventional intersection. As the traffic volumes increase, the difficulty for pedestrians increases.

Based on these factors the use of Roadway Dieting or Roundabouts are not recommended on Dixie Highway. The Northern Kentucky Area Planning Commission is currently considering the use of these devices on a route in Northern Kentucky. This installation, if approved, may offer greater insight as to their desirability for Dixie Highway.

