US 31W BYPASS ROAD DIET

Project Purpose:

The US 31W Bypass is a heavily developed commercial corridor between University Drive and Lehman Avenue with a high density of entrances and approaches. The roadway is a narrow four-lane roadway that currently does not provide a refuge lane for the high volume of left-turning vehicles, which reduces capacity and increases crashes. Because widening the roadway to add a two-way left-turn lane (TWLTL) is currently cost-prohibitive, a road diet to convert the existing four-lane road to a three-lane road with a TWLTL was evaluated to provide an economical solution to improve safety and mobility for all users.

Crash Rate:

- US 31W Bypass crash rate is 3 times the statewide average for similar roadway.
- Road Diet would **reduce crashes by 25 percent**.

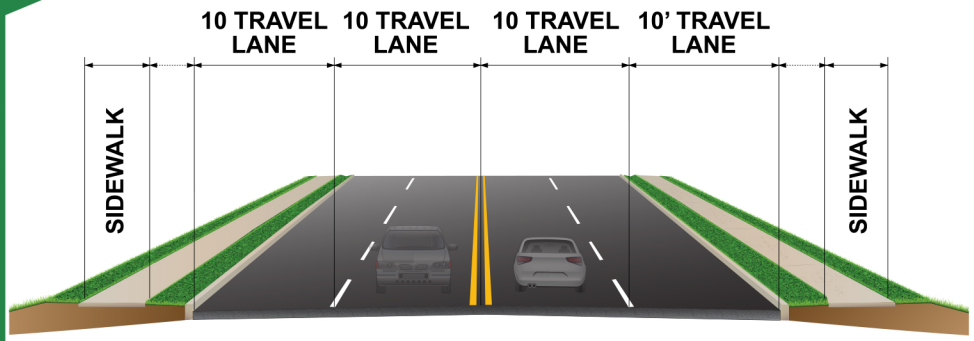
Traffic Operations:

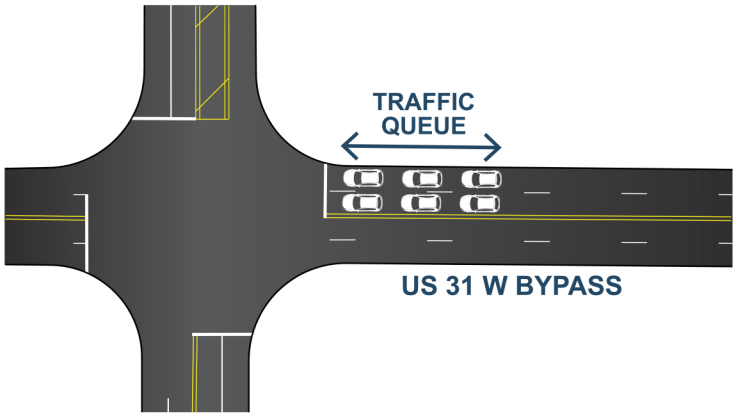
- **Similar or less travel delay** will be experienced **at all intersections**.
- However, traffic **queue lengths will be longer**.
- Less storage capacity of single thru lane increases queue length at signal.

Broadway Intersection:

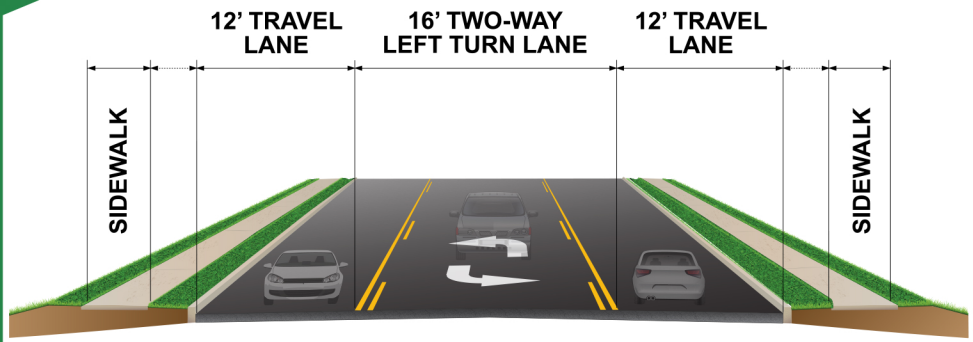
- Average **delay reduced 70-80 seconds** per vehicle!
- Traffic queues will be approximately twice the current length at traffic signal.

EXISTING CORRIDOR



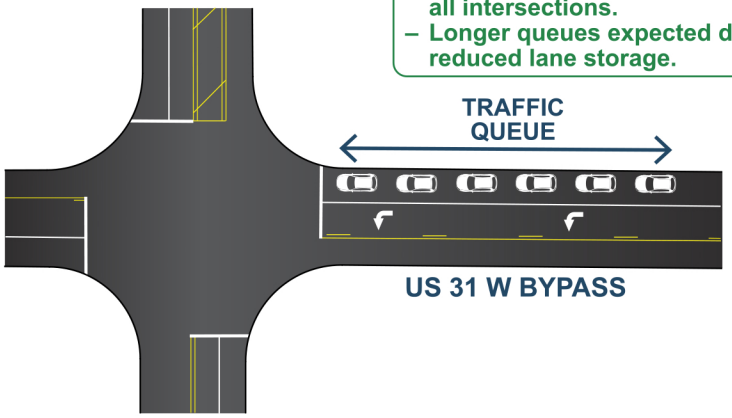


PROPOSED ROAD DIET



Proposed road diet would be implemented by re-striping the roadway as part of the regularly schedule repaving operation.

*** NOTES:**
- **Travel delay similar or reduced at all intersections.**
- **Longer queues expected due to reduced lane storage.**



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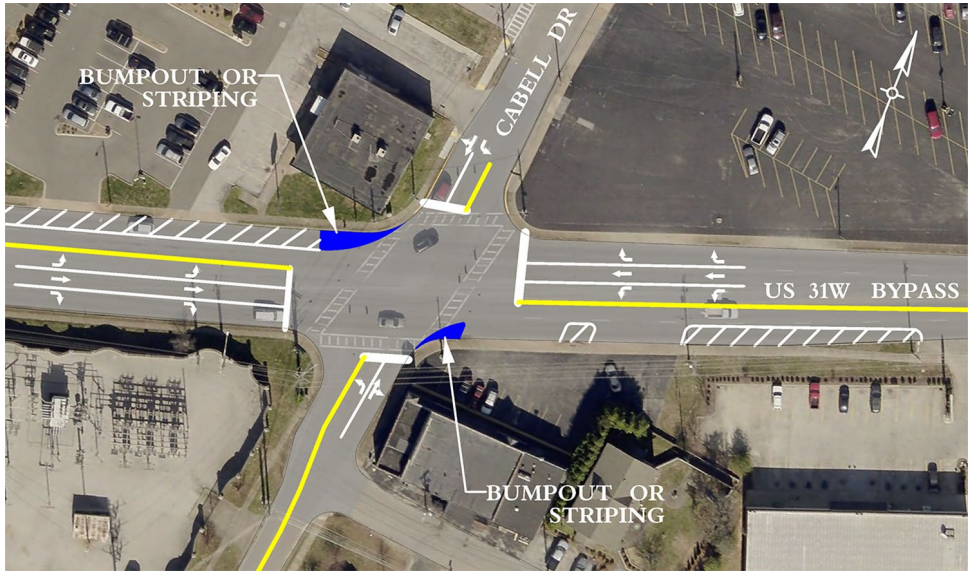
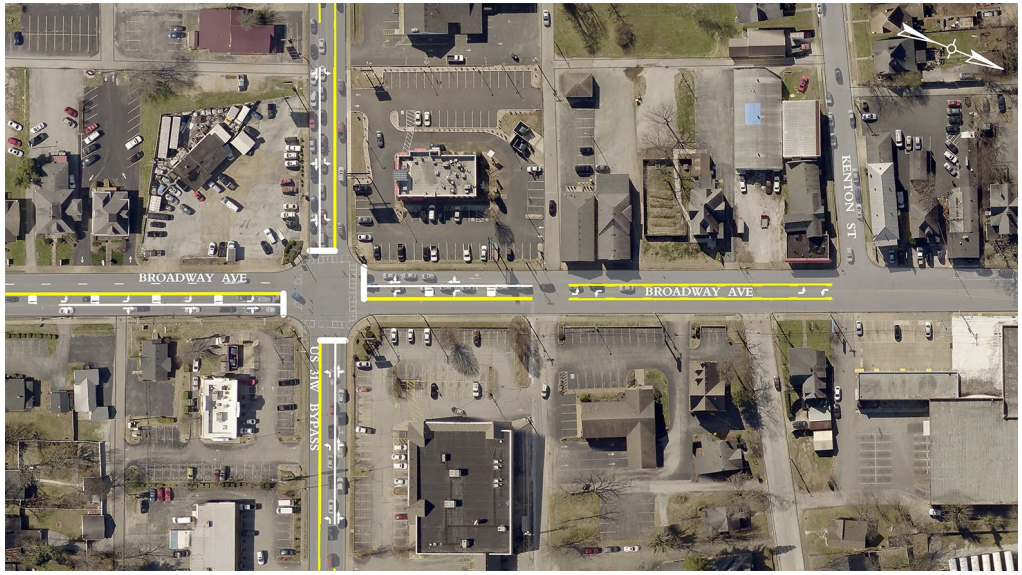
Conceptual Layouts:

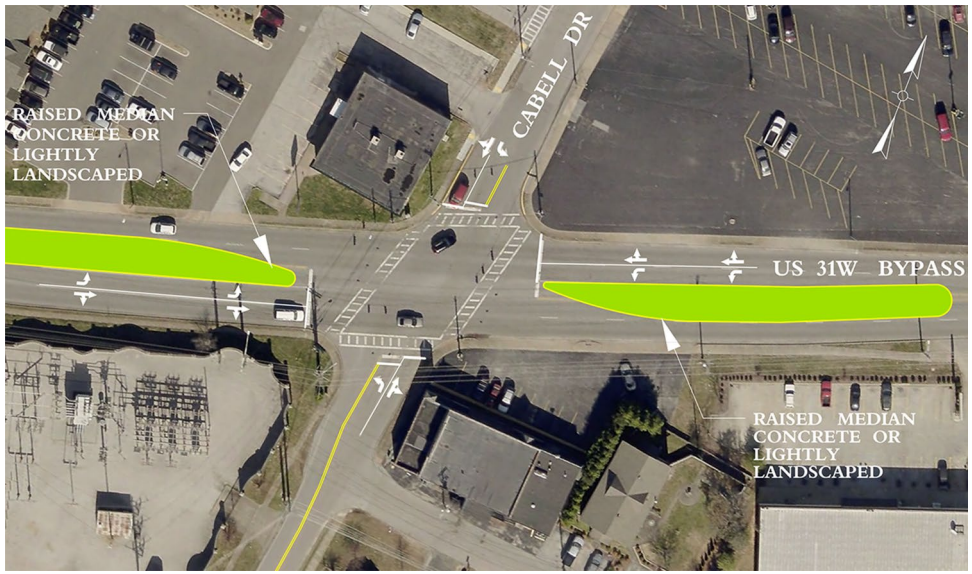
Existing intersection geometry will be modified to accommodate the proposed road diet. The following figures show conceptual layouts for the intersection of the US 31W Bypass and Cabell Drive, Broadway Avenue, and E 10th Avenue. A final alternative will be selected for the Cabell Drive intersection at a later date.



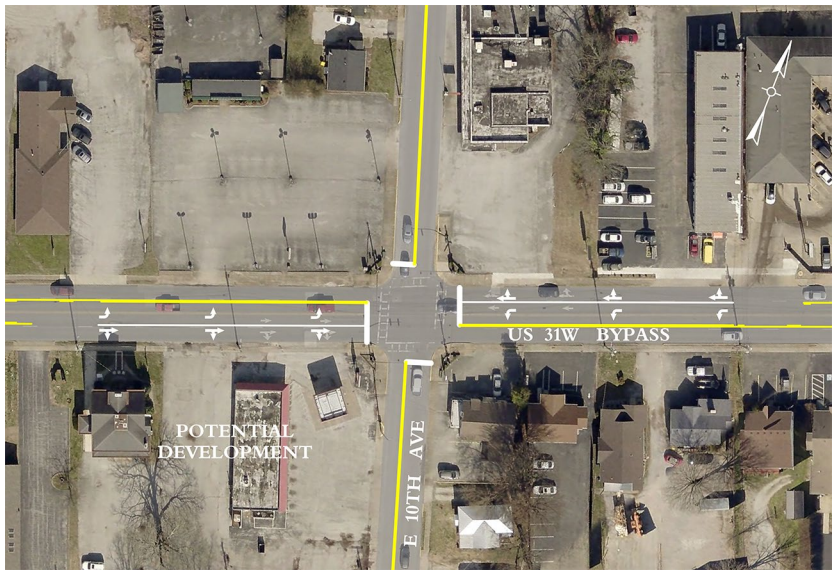
Cabell Drive Alt. 1: Bumpouts and Right-Turn Lanes



Broadway Avenue Proposed Lane Configuration



Cabell Drive Alt. 2: Raised Median without Right-Turn Lanes



10th Avenue Proposed Lane Configuration