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REGARDING REVISED SECTIONS 1-400.00 ROAD RECONFIGURATION AND 1-500.00 ROAD DIET

Effective immediately, Section 1-400.00 Road Reconfiguration and Section 1- 500.00 Road Diet have been revised to provide additional guidance on how to evaluate a Road Reconfiguration or Road Diet during rehabilitation, resurfacing, or reconstruction (3R) projects. The Roadway Design Guidelines Section 1 available online does not yet reflect these changes.

1-400.00 ROAD RECONFIGURATION

Road Reconfiguration is a change to the existing roadway that uses striping and reduced travel lane widths to slow operational speeds or uses the available pavement width to improve safety and to accommodate multimodal facilities. Road Reconfiguration provides the opportunity to address existing safety issues or multimodal accommodation in an expedited and cost effective manner. Additional information regarding Multimodal Design can be found in the Roadway Design Guidelines Chapter 9 – Multimodal Design Guidelines.

A Road Reconfiguration shall maintain the current Level of Service (LOS) without negatively impacting operational safety of the motorist and non-motorized users. All road reconfigurations must meet TDOT's minimum roadway design standards or require completion of a design deviation request justifying the reason for the deviation. All deviation requests shall be submitted to HQ Design Division as outlined under section 1-520.00 Plans Distribution and Review Process.

1-500.00 ROAD DIET

A Road Diet is the reduction of vehicular lanes of an existing four or six lane roadway to a three or five lane roadway, while maintaining reasonable Level of Service (LOS), improving operational safety, and/or accommodating non-motorized users to achieve systemic improvements.

Future LOS will be affected by urbanization which may subsequently change the context, capacity, and performance of an existing rural roadway sections. A Road Diet shall maintain a reasonable Level of Service (LOS) without negatively impacting operational safety of the motorist or non-motorized users. Existing Roadway sections serving at LOS D capacity or worse are not good candidates for a road diet. Any LOS reduction should clearly justify the safety benefits and document the process as outlined under section 1-520.00.

A Road Diet request should be accompanied by a traffic engineering study including intersection/corridor analysis (1-510.20) of the existing corridor as indicated in Figure 1-12. A Road Diet request shall be coordinated with local agencies for them to evaluate with agency development plans and receive local support.

1-510.00 ROAD DIET EVALUATION CRITERIA

The following evaluation criterion was developed to assess whether a 3R project may include a Road Diet into the existing project scope.

The Road Diet intersection/corridor analysis flow chart (Figure 1-12) and questionnaire (Table 1-4) shall be completed. A Road Diet can be implemented without further evaluation at roadway locations where the current traffic volume is less than 10,000 ADT and all Road Diet questionnaire questions are answered NO; however, a letter from the local agency indicating community support for a proposed Road Diet is required unless an overriding safety justification is established by TDOT.

If AADT is more than 10,000, follow the flow chart to determine if further traffic engineering analysis is needed to evaluate the operational and safety impacts to current traffic conditions. The evaluation results shall be submitted as outlined in section 1-520.00

The maximum threshold for any proposed Road Diet project is 25,000 ADT and/or 1700 veh/hr/ln. Such locations likely will require capital improvements to be deployed to mitigate the impacts to LOS which is beyond the scope of 3R projects. All Road Diet designs must meet TDOT's minimum roadway design standards or require completion of a design deviation request justifying the reason for the deviation. All design deviation requests will be addressed by the H Q Roadway Design Division.

1-510.10 ROAD DIET INTERSECTION/CORRIDOR ANALYSIS

A capacity evaluation should be completed per the following flow chart (Fig. 1-12) for proposed Road Diet projects. As seen in the flow chart, if the ADT is less than 10,000 proceed with Road Diet Questionnaire, no further traffic engineering evaluation is required. ADT's above 10,000 shall follow the flow chart to determine if a Synchro model will be required to evaluate the impacts. The evaluation should use current AADT and a LOS based on the pavement life of the highway section.

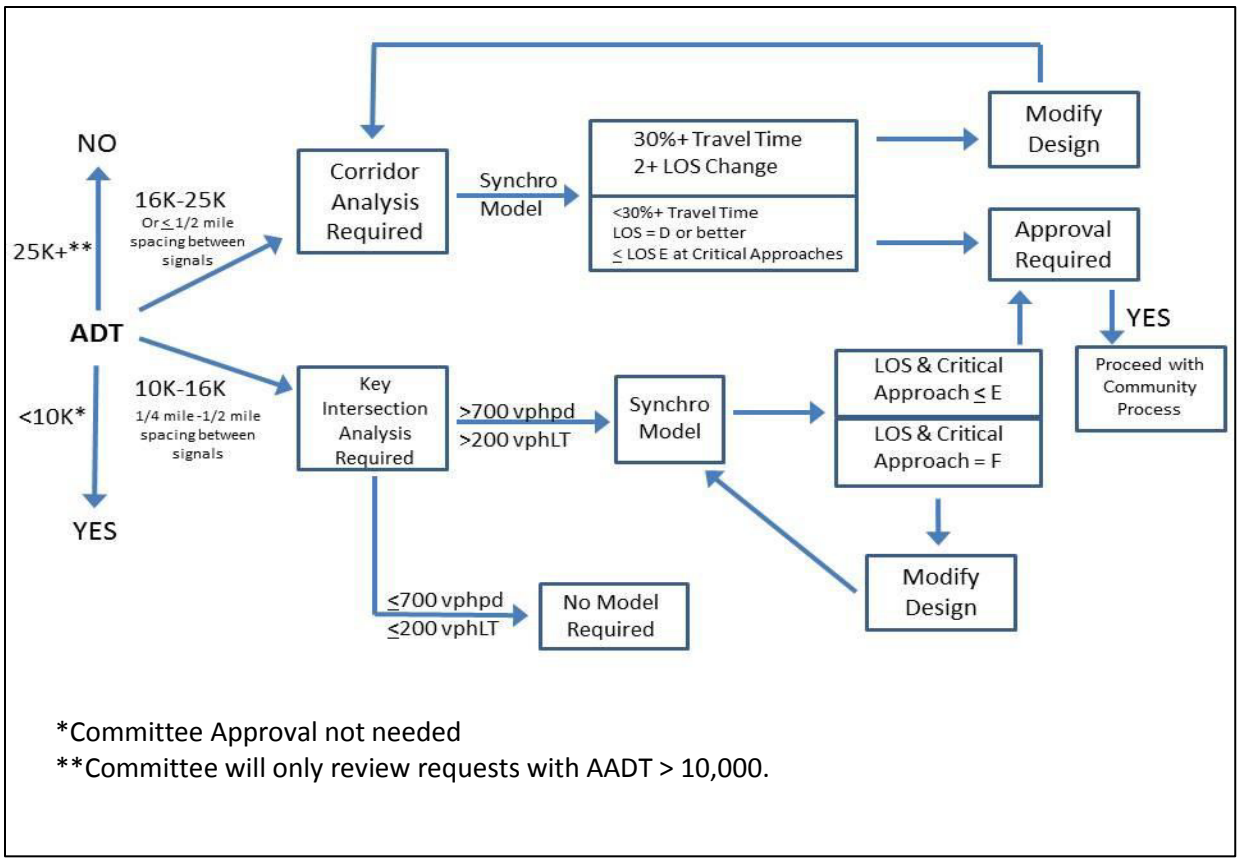

Figure 1-12
Typical 4-to-3 Lane Conversion Evaluation

1-510.20 ROAD DIET QUESTIONNAIRE

Roadway projects identified as a candidate for a Road Diet must be evaluated using the following questionnaire. Any project answering **YES** for any question in the following table (Table 1-4) **will require** further evaluation considering the Road Diet Context Elements listed under section 1-510.30.

	YES	NO
Is the current Average Daily Traffic (ADT) greater than 25,000?		
Is the current posted speed limit greater than 45 MPH?		
Is the highway a diversionary route for an interstate highway?		
Is the existing per hour/per lane peak hour volume greater than 1700?		
Does the facility have a bus route with stops? (4 lanes to 3)		
Are there more than 10 driveways per mile present? (4 lanes to 3)		
Will the existing roadway pavement drainage be affected?		

Table 1-4

If all above questions are answered **NO,** then a road diet may be implemented during resurfacing without further evaluation by the committee.

1-510.30 ROAD DIET CONTEXT ELEMENTS

For projects identified as requiring further evaluation, the reviewers shall consider the following elements:

a) Multimodal needs
b) Project limits vs. corridor
c) Crash frequency or severity linked to:
    1. Lack of turn lanes
    2. Higher than desirable operational speeds
    3. Poor access management
    4. Bus stop locations (4 lanes to 3)
    5. Driveway density (4 lanes to 3)
    6. Increased presence of vulnerable users
d) Community support for alternative modes of transportation accommodation
e) Proximity to freeways
f) Designation as an evacuation route or other emergency use
g) Existing and future land use along the corridor

1-520.00 PLANS DISTRIBUTION AND REVIEW PROCESS

All Road Reconfiguration, Road Diet, and design deviation requests shall be submitted by the Regional Resurfacing Design Supervisor or a requesting agency to TDOT.Design@tn.gov. All information, plan sheets, Road Diet questionnaire, as needed, intersection corridor analysis, as well as all identified and evaluated context elements should be included.

The HQ Roadway Design Division will share the information among a committee represented by TDOT Traffic Operations, HQ Roadway Design, Multimodal, Long Range Planning, and Maintenance Divisions as well as the regional project delivery and regional traffic engineering offices. This committee will identify whether the geometric design criteria, operational safety impacts, and context elements could be mitigated safely within the existing ROW. Providing ample time to complete this review is important. Therefore providing requests in a timely manner is critical. The Designer will receive a response and comments from the committee addressing whether the proposed Road Diet could be implemented within the scope of the project or if a separate project with additional planning would be required. The Designer and/or requestor shall keep all reference materials and correspondence in the project folder.

This Instructional Bulletin voids IB 17-10.

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KJL:ARH

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