

#### STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

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JOHN C. SCHROER COMMISSIONER BILL HASLAM GOVERNOR

# **INSTRUCTIONAL BULLETIN NO. 17-10**

#### REGARDING NEW SECTIONS 1-300.00 ROAD RECONFIGURATION AND 1-400 ROAD DIET

**Effective immediately,** a new Section 1-300.00 Road Reconfiguration and Section 1-400.00 Road Diet have been added to provide guidance on how to evaluate a road reconfiguration during the resurfacing and how to evaluate a road diet on 3R roadway projects.

## 1-300.00 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 accommodate multimodal facilities. Road Reconfiguration provides the opportunity to address existing safety issues or multimodal needs 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 vehicular capacity and Level of Service (LOS) without impacting operational safety of the motorist or non-motorized users.

Road Reconfiguration requests due to safety concerns should be accompanied by a completed Road Diet Questionnaire (1-410.10) and intersection/corridor analysis (1-410.20). Road Reconfiguration requests due to multimodal accessibility needs should be accompanied by appropriate state or local planning documents showing bicycle and pedestrian connectivity plans supporting the need. Documenting that the proposed reconfiguration received strong community support from the local agency is needed as well. All information shall be reviewed and approved by the regional Traffic Engineer. If intersection/corridor analysis has been completed for a road reconfiguration due to safety concerns, all material should be submitted to the Traffic Operations Division by email for review. All Road Reconfigurations must meet minimum roadway design standards. All design deviations should be addressed by the Roadway Design Division.

#### 1-400.00 ROAD DIET

A Road Diet is the reduction of vehicular lane capacity of an existing underutilized four or six lane arterial or collector roadway to a three or five lane roadway, while maintaining an appropriate Level of Service (LOS) for current and future traffic volumes, potentially improving operational safety goals, and/or to accommodating non-motorized users to achieve systemic improvements.

Future LOS can be affected by urbanization which may subsequently change the context, capacity, and performance of an existing rural roadway section. A Road Diet shall maintain the current vehicular capacity and Level of Service (LOS) without impacting operational safety of the motorist or non-motorized users.

A Road Diet due to safety concerns should be accompanied by a traffic engineering study including intersection/corridor analysis (1-410.20) of the existing corridor. A Road Diet due to multimodal needs should be accompanied by appropriate state or local planning documents showing bicycle and pedestrian connectivity plans supporting the request. Documenting that the proposed reconfiguration received strong community support from the local agency is needed as well. A Road Diet is typically incorporated into rehabilitation, reconstruction or resurfacing projects.

## 1-410.00 ROAD DIET EVALUATION CRITERIA

The following evaluation criterion is to assess if a 3R project may include a Road Diet into the existing project scope without any complication and significant cost.

The Road Diet questionnaire, intersection/corridor analysis, and context elements evaluation shall be completed.

If all Road Diet questionnaire questions are answered NO, than the evaluated roadway section does not need to have an intersection/corridor analysis. If the evaluation of the Road Diet context elements identifies no concerns, the Road Diet may be included in the scope of a project by adjusting quantities, pay item numbers, and notes. 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 documenting community support for a proposed Road Diet to accommodate alternative modes of transportation accommodation is needed. Road Diets to improve safety do not need community support documentation. All Road Diet proposals must meet the minimum roadway design standards. All design deviation requests should be addressed by the Roadway Design Division.

If the three-step evaluation identifies operational or safety concerns, the evaluation results and a set of roadway plans should be submitted to the Traffic Operations Division by email for further review and evaluation. Any additional sources should be referenced as well. The evaluation results will be reviewed to identify whether the geometric design criteria, operational safety impacts, and context elements could be mitigated safely within the existing ROW. 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.

## 1-410.10 ROAD DIET QUESTIONNAIRE

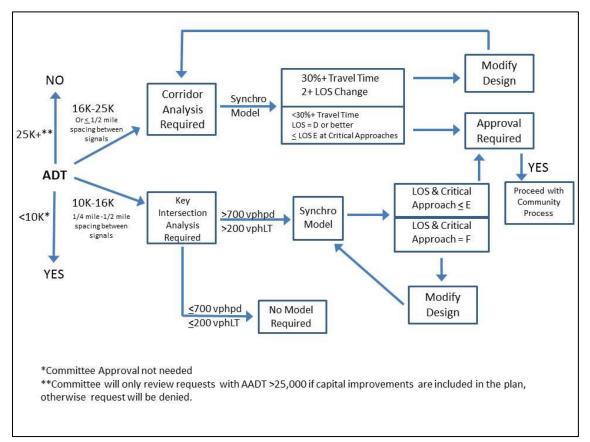
All roadway projects, including resurfacing, that is identified as a candidate for a Road Diet must be evaluated using the following questionnaire. Any project answering YES for any question in the following table (Table 1-4) **will not** be a candidate for a Road Diet within the scope of a project without further evaluation. It is important to note the maximum ADT is 25,000 and/or <1700 veh/hr/ln. If a proposed Road Diet project exceeds the maximum ADT, capital improvements must be deployed to mitigate impacts to LOS.

	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?		
Are there more than 10 driveways per mile present?		
Will the existing drainage be affected?		

Table 1-4

## 1-410.20 ROAD DIET INTERSECTION/CORRIDOR ANALYSIS

A capacity evaluation should be completed per the following flow chart (Fig. 1-12) for proposed Road Diet projects if deemed necessary as outlined above. The evaluation should use current AADT and a LOS based off the pavement life of the highway section.



#### IB 17-10

#### 1-410.30 ROAD DIET CONTEXT ELEMENTS

Projects being evaluated for a Road Diet shall address 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

#### 1-420.00 PLANS DISTRIBUTION AND REVIEW PROCESS

All Road Reconfiguration and Road Diet reviews shall follow the Field Review Distribution by email guidance in Roadway Design Guidelines Section 1-120.21. All information, evaluation, reference material and correspondence from the Traffic Operations or Roadway Design Division shall be kept in the project folder.

Jernifer dhay

Jennifer Lloyd, PE Civil Engineering Director Roadway Design Division

KJL:ARH November 9, 2017