

New Jersey Turnpike Authority

P.O. Box 5042, Woodbridge, NJ 07095



May 11, 2017

Document Change Announcement

2007 Design Manual

Traffic Control in Work Zones

DCA2017DM-01

Subject: Revisions to

Section 9 Traffic Control During Construction, Subsection 9.4 Traffic Impact Report

Section 9 Traffic Control During Construction, Subsection 9.11 Construction Details

Description of Change:

Refer to the attached Document Change Request form for more information.

Notice to NJTA Staff and Design Consultants:

Effective immediately, all contracts currently in the design phase shall incorporate the revisions herein.

For advertised contracts awaiting the opening of bids this revision may be incorporated via addendum.

Contact your NJTA Project Manager for instruction.

The revisions may be accessed on the Authority's webpage: <http://www.state.nj.us/turnpike/professional-services.html>

Recommended By:

John M. Keller, P.E.
Deputy Chief Engineer - Design

Approved By:

Robert J. Fischer, P.E.
Chief Engineer

Distribution: Senior Staff Engineering, Law, Maintenance & Operations Depts., All Prequalified Consultant Firms, File

New Jersey Turnpike Authority

DOCUMENT UPDATE REQUEST

Forward to Deputy Chief Engineer, Design

Initiator	Steve Alpert, P.E.	Submittal Date	5/8/17
Firm	HNTB Corporation	Telephone	973-434-3100
Reviewed By (Operations)			

Document (check one)

- Procedures Manual
- Design Manual
- Manual for Traffic Control in Work Zones
- Sample Plans
- Standard Drawings
- Standard Specifications

Description of Change

Material from the Manual for Traffic Control in Work Zones is being moved to Section 9 (Traffic Control During Construction) of the Design Manual:

- Summer Lane Shifts on the Garden State Parkway (Manual for Traffic Control in Work Zones Section 3.2.6) will be moved to Design Manual Section 9.4, "Traffic Impact Report".
- Language relating to signs for work zones not depicted in the plans or Standard Drawings (Manual for Traffic Control in Work Zones Section 3.3.1) will be moved to Design Manual Section 9.11.2, "Signs".

Section 9.11.2.1 is also revised to clarify sign sizes relative to the posted speed limit.

Revised Sections 9.4 and 9.11.2 are included with this Document Update Request.

Reason for Change

Revisions included in the 2016 Manual for Traffic Control in Work Zones have resulted in removal of certain material that is still part of the Authority's standards. This material was found to be more appropriately included in the Design Manual.

9.4 TRAFFIC IMPACT REPORT

As part of the development of the Traffic Control Plans, the Engineer shall conduct an analysis of construction related impacts. For construction on roadways other than the New Jersey Turnpike or Garden State Parkway, the findings should be presented in a detailed Traffic Impact Report that addresses the following items:

1. The existing traffic volumes and capacity data on the roads likely to be substantially impacted.
2. The projected traffic data at the start of construction including nearby highway construction projects as well as private construction projects.
3. The potential impacts of the construction on traffic through the project and along any detours.
4. The potential impacts to existing adjacent property, including shopping centers and sports facilities.
5. Recommendations for traffic impact mitigation, e.g., nighttime work, restricted hours of operation, number of lanes available for traffic, width of lanes, requirement for alternating traffic, staging requirements, public information program, and transportation demand management strategies such as park and rides, shuttle buses, flextime, etc.

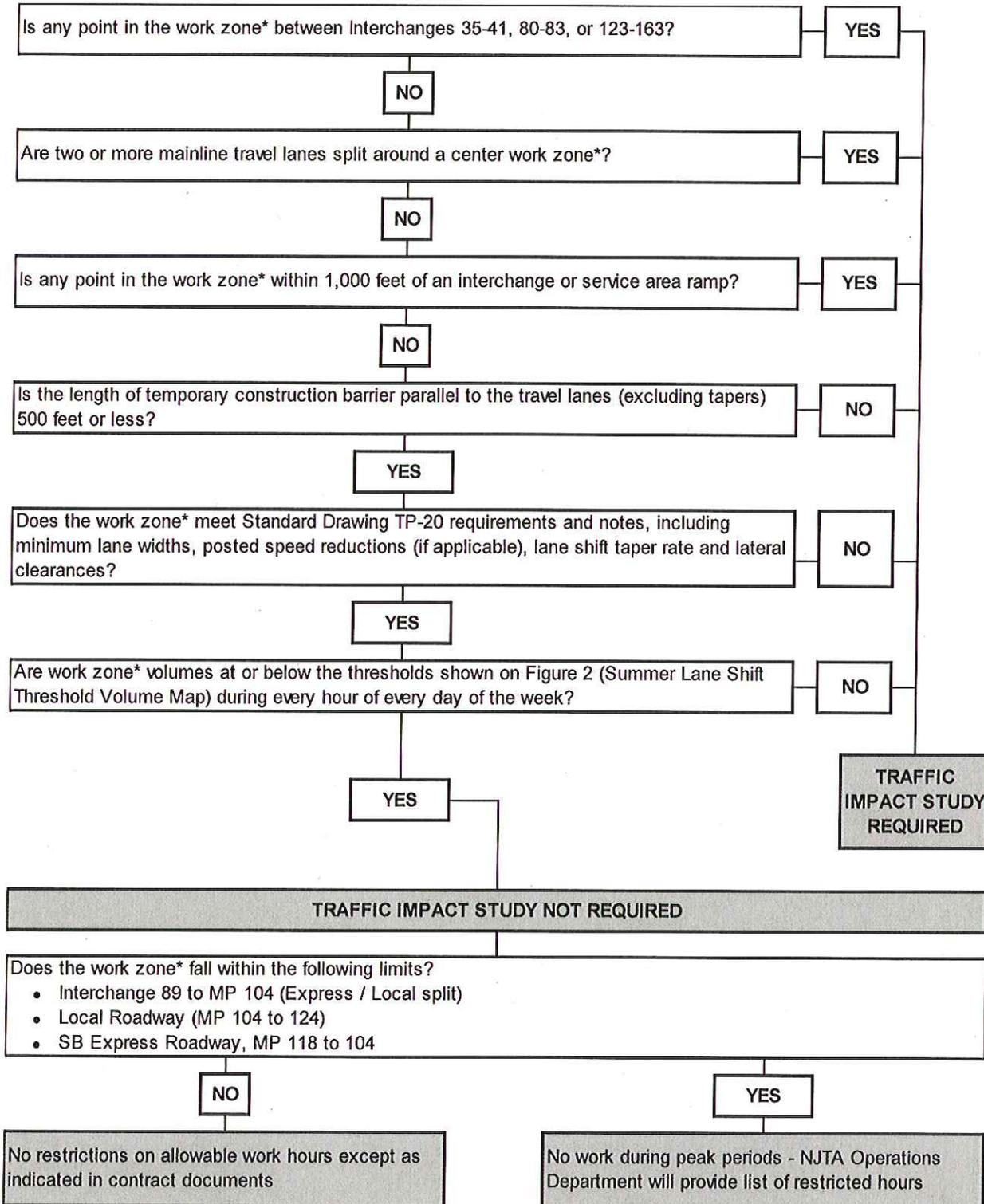
During the Summer season, as defined in the Authority's Lane Closure and Shoulder Closure Tables, the Garden State Parkway experiences increased traffic volume, especially south of Interchanges 127-129. Due to this regular occurrence, the Authority generally requires a Traffic Impact Report to be submitted and approved for a proposed installation of a long-term lane shift that would be in place during the Summer season. The report must include quantitative analyses and observations of mainline operations and operations of any ramp within 1,000 feet of the work zone following the methodology of the latest edition of the Highway Capacity Manual (HCM), demonstrating that any adverse impacts caused by the lane shift, including queues along exit ramps, will be limited to the satisfaction of the Authority.

There are limited exceptions to the requirement to submit a Traffic Impact Report for long-term lane shifts to be installed on the Parkway during the Summer season. The flow chart in Exhibit 9-7 describes the circumstances under which a report would not be required, including work zone location, configuration and traffic volumes. Exhibit 9-8 shows the threshold volumes above which a report will be required for each Garden State Parkway segment. Note that even if a Traffic Impact Report is not required, the Authority still may limit construction activity within the lane shift during peak periods. In that circumstance, the Authority's Operations Department will provide a list of restricted work hours.

The Authority's Operations Department shall be consulted during the development of the Traffic Impact Report through the Authority's Project Manager. The Authority's Operations Department will provide the Engineer with the permissible New Jersey Turnpike and Garden State Parkway lane and roadway closing hours for a project.

EXHIBIT 9 - 7

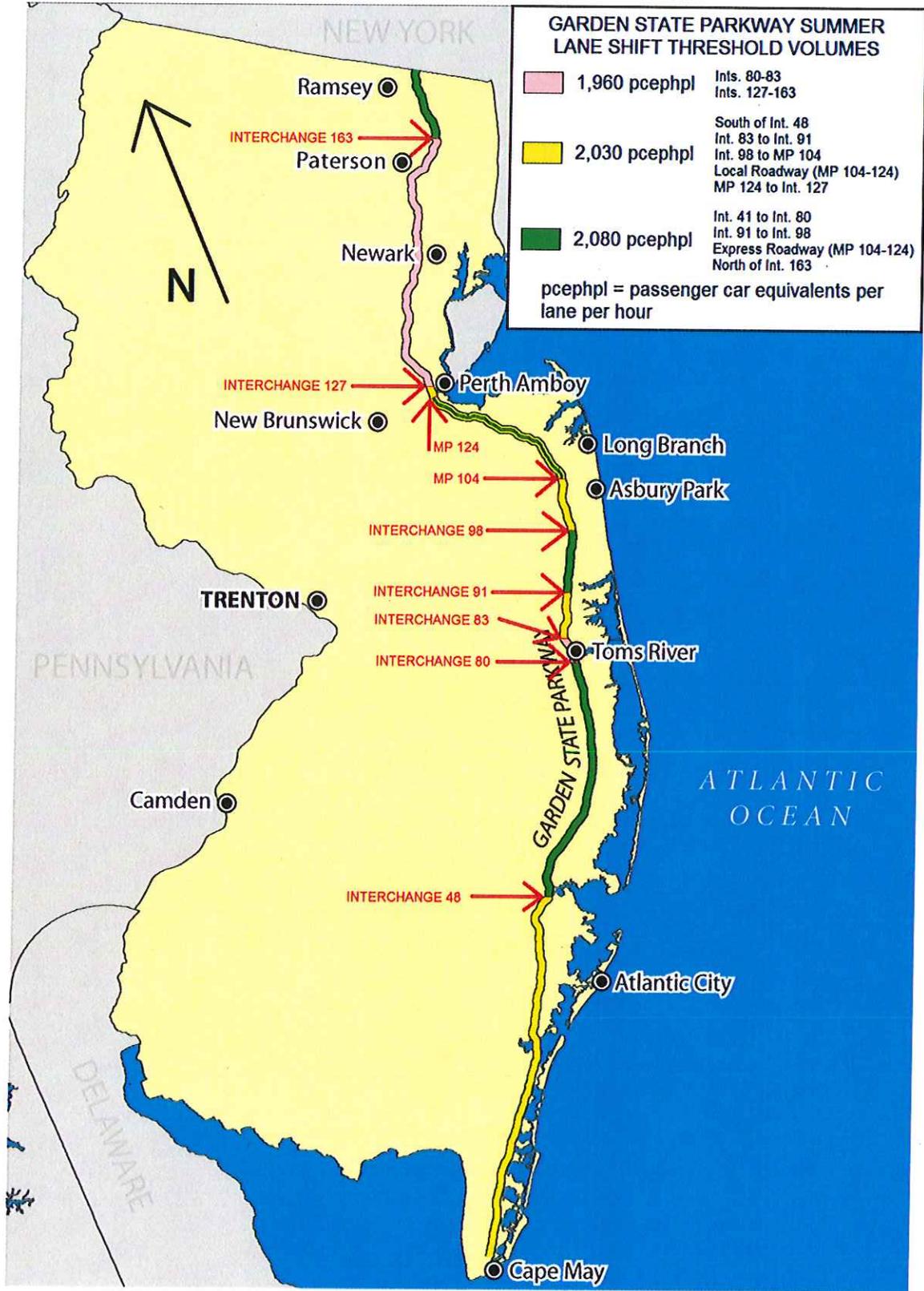
GARDEN STATE PARKWAY SUMMER LANE SHIFT RESTRICTIONS FLOW CHART



* "Work zone" is measured from the beginning of the shoulder closure taper to the last cone or barrier segment in the closure.

EXHIBIT 9 – 8

GARDEN STATE PARKWAY SUMMER LANE SHIFT THRESHOLD VOLUME MAP



9.11.2 Signs

9.11.2.1 General

1. Any construction sign not depicted on the Standard Drawings shall be shown in detail.
2. All signs should be sized relative to the posted speed limit (consult the FHWA Manual on Uniform Traffic Control Devices and the Standard Drawings).
3. Determine if specific site conditions require special supplemental signing. The use of variable message boards should be considered and approved by the Authority's ~~appropriate~~ Operations Department.
4. For work zones that are not depicted in the plans or Standard Drawings:
 - a. Related Standard Drawings and Part 6 of the MUTCD, particularly Chapter 6H (Typical Applications), shall be used as a guide to establish the minimum provisions for sign placement.
 - b. The Authority's Operations Department shall be consulted for a determination of work zone treatment.
 - c. The specific locations of signs for each work zone shall be depicted in plans and approved by the Engineer.
 - d. Traffic control signs for work zones that encompass an on- or off-ramp may require plan-specific locations in lieu of a field determination due to the complexity of the work zone closure.

9.11.2.2 Tables for Construction Signs

In order to estimate the required quantity of signs in square feet, the Engineer should prepare a summary of signs for the project. This summary of construction signs shall be shown on a table, and included on the first sheet of the Traffic Control Plans. An example of a completed table listing the sign designation, quantity and area in square feet is shown in the Sample Plans.