# Internship ID#<u>SM14CPMTRAFFIC</u>

# **NEW JERSEY DEPARTMENT OF TRANSPORTATION**

# **INTERNSHIP OPPORTUNITY**

Internship/Semester:	Summer
----------------------	--------

Internship Type: Non-Credit

Intern Level: Undergraduate/Graduate

## Suggested Background and/or Knowledge:

Civil engineering/engineering/scientific background. Basic English communication skills and basic computer skills desired.

## NJDOT Division/Unit/Program Area Offering the Internship:

Division: Highway & Traffic Design; Bureau: Traffic Engineering; Program Areas, Special Projects South.

## **Description of NJDOT Division/Unit/Program Area Offering the Internship:**

Engineering handles review of capital and access-related project submissions as well as investigation/design of operational requests; Special Projects handles investigation/design of signs and striping systems at non-signalized locations.

#### **Internship Locations:**

NJ DOT Headquarters 1035 Parkway Avenue Trenton, New Jersey

## **Internship Project Description:**

Assist in engineering-related investigations, designs, reviews, document creation and file maintenance.

#### **Estimated Project Duration and Suggested Weekly Work Schedule:**

Various projects and time frames currently exist. Work week days and hours are flexible to accommodate interns' schedules.

# Internship Learning Objectives/Marketable Skills:

The interns will learn NJDOT design/review/investigational/procedural skills involving all types of traffic control devices as well as learning to work in both office and field environments with people of different titles, educational backgrounds and levels of expertise.

# Intern will be trained in the following area(s):

# **Sign Shop Training**

The intern will spend time with NJDOT's sign shop personnel. The intern will be shown the process to receive the sign inventory, and the machinery used to create and fabricate traffic signs.

## **Office Work Programs**

The intern will receive training in using the State Straight Line Diagram, The State Videolog System, and the SignCad Program for creating White on Green overhead signing.

The intern will gain experience in using "Google Earth" in a way that helps the Unit complete assignments.

## **Office Work Material for Assignments**

The intern will be trained in how to prepare a TE-9 sign work order and the paperwork needed to complete the TE-9 work order packet.

The intern will be trained in how to complete an EL-11 pavement marking work order and the paperwork needed to complete the packet.

The intern will be shown how to read and understand the State issued Traffic Signal Timing Directive.

The intern will be shown how to read and understand the Traffic Signal Signing and Pavement Marking Plans.

The intern will be shown how to read and understand the Traffic Signal Electrical Plans.

The intern will be shown how to read and understand the not-to-scale Signing Plans on State Roads.

The intern will be shown how to read and understand the State Roadway No Passing Zone Plans.

The Intern will be shown how to use the Traffic Signal Approval Book.

# **Field Work Training**

The intern will learn how to take measurements and as-build a signalized intersection to verify that the signal plan is accurate.

The intern will learn how to use a digital measuring instrument (DMI).

The intern will learn how South Special Projects conducts a field investigation.