

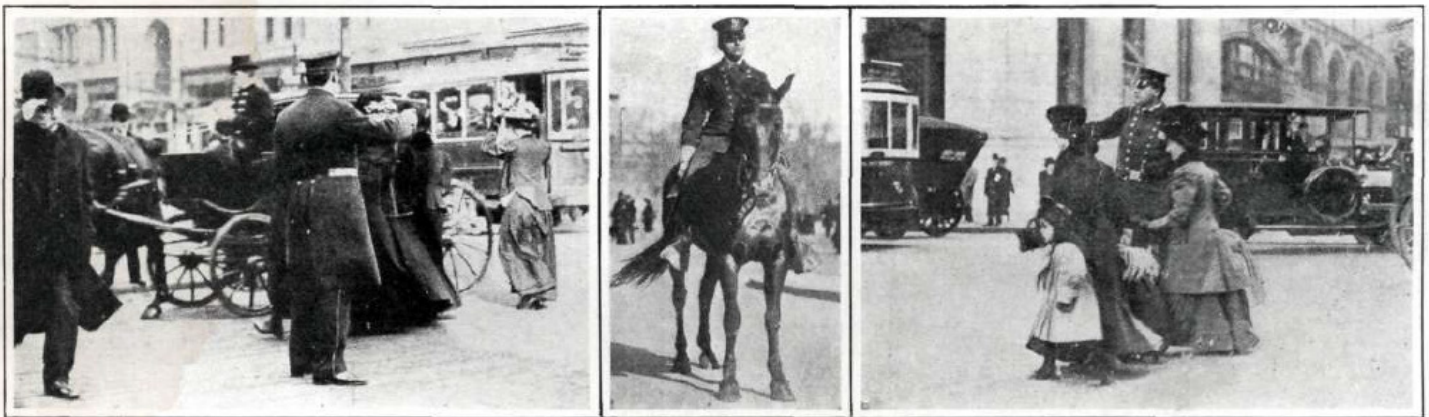


Data Spotlight

April 5, 2021

Explore Transportation History Archived at the National Transportation Library

From congested carriage traffic in New York City to automated platoons of connected vehicles, the Bureau of Transportation Statistics has a one-stop shop where you can pursue your interest in transportation past, present, and future. The [National Transportation Library \(NTL\)](#) is one of the four officially-designated national libraries in the United States and is the full-text repository for [USDOT-funded research](#).



Early photographs of traffic incidents in William Phelps Eno's Street Traffic Regulation

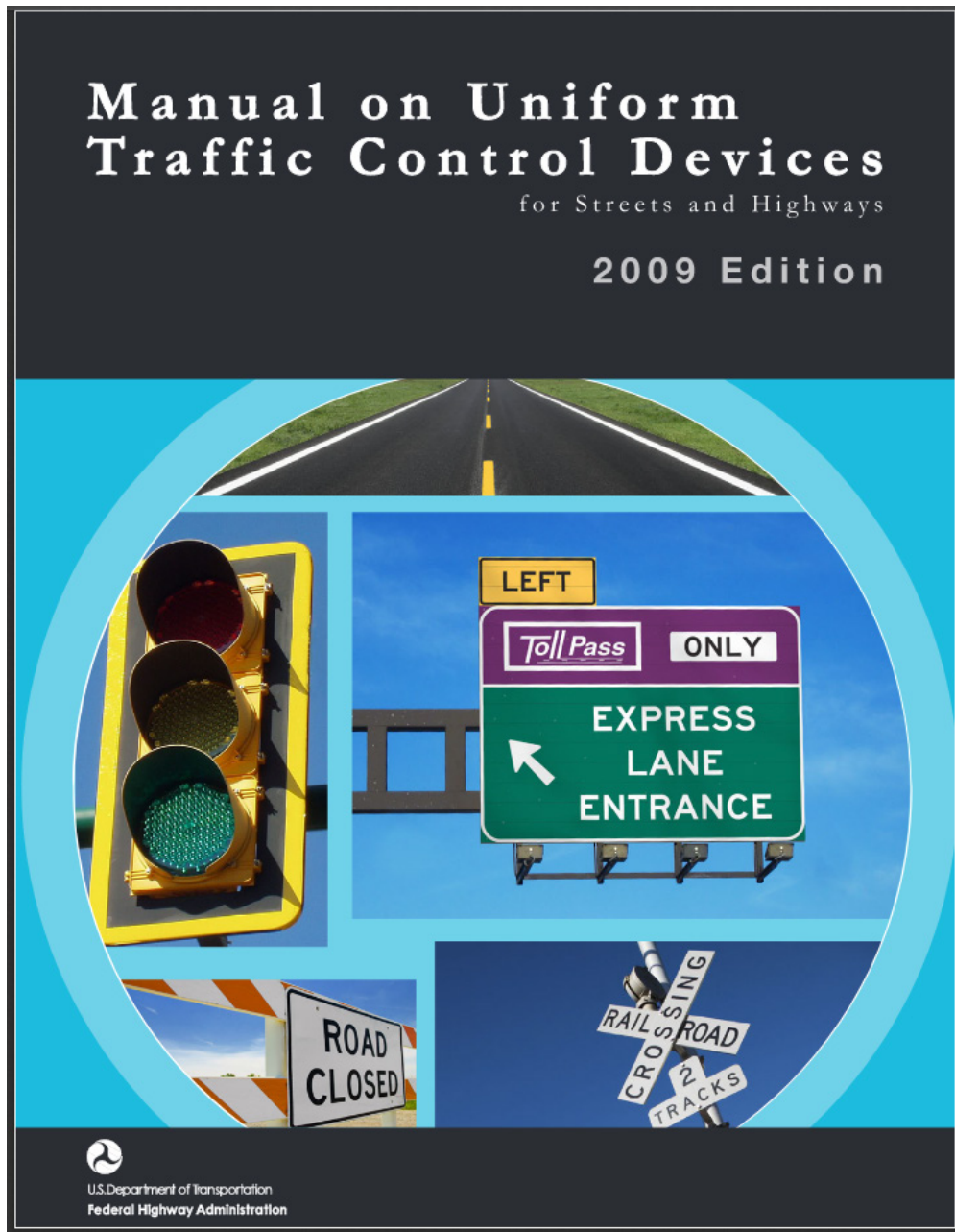
TRAFFIC PROBLEMS DATE TO THE NINETEENTH CENTURY.

The earliest NTL artifact is William Phelps Eno's 1909 [Street Traffic Regulation](#) which included a regulation on traffic speed: "No vehicle shall proceed at any time at a greater speed than the law allows and is safe and proper under the conditions then obtaining."

In mid-1800s Manhattan, Eno was dismayed by the "needless inconvenience through the blocking of streets by ungoverned traffic and difficulty in getting carriages at the opera and theater." This initiated his decades-long involvement in developing traffic regulations, including his 1921 establishing of the Eno Foundation for Highway Traffic Regulation. A century later, the [Eno Center for Transportation](#), as it is known today, is one of the NTL's many organizational partners and donated the [five Eno documents now in the NTL](#) repository.

SAFETY A CONSTANT THREAD IN TRANSPORTATION.

It's possible to draw a straight line between Eno's earliest work and traffic safety measures in development today. That line would pass through the various editions of the [*Manual on Uniform Traffic Control Devices*](#) published between 1935 and 2012.



Cover of the 2009 *Manual on Uniform Traffic Control Devices*

NTL EVOLVES ALONGSIDE TRANSPORTATION – FROM HORSE-MOUNTED TRAFFIC SQUAD TO DATASETS AND AUTONOMOUS VEHICLES.

Interest in improving traffic flow and safety continue to this day. For example, the USDOT and its Intelligent Transportation Systems Joint Program Office (ITSJPO) are guiding development of safe and effective connected vehicles and infrastructure. What's the most effective way to inform drivers of a red light ahead? Find out in the [*Feasibility Study and Assessment of Communications Approaches for Real-Time Traffic Signal Applications*](#), published in December 2020. This study and its results dataset are part of the [NTL's ITSJPO collection](#).

- **RAW_TEST_09_19.zip:** All data logs for test conducted on 09/19/2019
 - **RSUCapture:** All logs for data generated and recorded at the RSU
 - **morning_spat_2:** Recorded during morning session of the test run
 - tx_ota.csv and .pcap: all transmitted messages recorded at ota interface in csv and pcap format
 - tx_r1a.pcap: all messages transmitted at r1a interface and this log did not contain any spat messages
 - tx_r1c.csv and .pcap: all transmitted messages recorded at r1c interface in csv and pcap format
 - tx.csv and .pcap: all transmitted messages recorded in csv and pcap format
 - **afternoon_spat_2:**
 - RSU_4_1-cw-mon-tx-20190919160953.csv and .pcap: All transmitted messages at the cw-mon-tx interface of the RSU logged in csv and pcap format
 - RSU_4_1-cw-mon-txa-20190919160953.csv and .pcap: All transmitted messages at the cw-mon-txa interface of the RSU logged in csv and pcap format
 - RSU_4_1-cw-mon-txb-20190919160953.csv and .pcap: All transmitted messages at the cw-mon-txb interface of the RSU logged in csv and pcap format
 - **VCCLOG_09_19_mov:** This folder contains logs for the moving (mov) vehicle
 - **OBUCapture:** (where X = {1,2,3,4} and Y = {a,b}. Tests 1 and 2 were conducted during the morning session and tests 3,4 were conducted during the afternoon session.)
 - testXY_spat.csv: OBU receive logs containing SPAT messages only recorded during test run XY in csv format
 - testXY.csv and .pcap: OBU receive logs containing all messages recorded during test run XY in csv and pcap format
 - vccmov.csv: This file contains SPAT messages, recorded through VCC using cellular networks, at the laptop installed in the moving vehicle.

File description for an ITSJPO dataset assessing communications for real-time signal applications

MOVING FORWARD?

What's the next step in regulating the flow and safety of traffic on America's roads? It's difficult to say, but, whatever the answer is, you'll be able to read about in the [National Transportation Library](#).