

**DATE:** August 26, 2019

**SUBJECT:** TE-153 (Pennsylvania Adaptive Signal Control Evaluation)

**TO:** District Executives

**FROM:** Jonathan Fleming, Acting Director *Jonathan Fleming /s/*  
Bureau of Maintenance and Operations

This Strike-off Letter replaces Strike-off Letter 494-13-02 issued on February 15, 2013. It is time and resource neutral and will result in clarification on the Department's use of Form TE-153 (Pennsylvania Adaptive Signal Control Evaluation).

Form TE-153 assists designers when evaluating Adaptive Signal Control Technology Systems by providing Pennsylvania-specific information that identifies appropriate needs and requirements. This traffic engineering form should be used in conjunction with Federal Highway Administration's (FHWA) Model Systems Engineering Documents for Adaptive Signal Control Technology Systems [FHWA-HOP-11-027].

**For projects proposing adaptive traffic signal control:**

- The systems engineering process using Form TE-153 is required for the following:
  - Federally funded projects
  - State funded projects, including projects with state grant funding such as Green Light-Go, ARLE, Multimodal
  - Municipal projects
  - Developer projects, including Highway Occupancy Permits (HOP)
- Department Projects: Form TE-153 through Part H needs to be completed and submitted to the BOMO Arterial Operations Unit (AOU) for approval prior to beginning of preliminary engineering.
- Municipal and Developer Projects: Form TE-153 through Part H needs to be completed and submitted to AOU as part of the first traffic signal submission.
- Projects currently in design: Form TE-153 through Part H needs to be completed and submitted to AOU as soon as possible.
- After the adaptive system is functional: Form TE-153 Part I (Verification and Validation) needs to be completed and submitted to AOU. The analysis cannot be completed by the system designer to eliminate potential conflicts of interest. INRIX speed data may be used to reduce or eliminate field data collection using the RITIS Probe Data Analytics Suite (<https://pda.ritis.org/suite/>).

The following table identifies the party responsible for completing Form TE-153 through Part H:

<b>Project Type</b>	<b>Typical Agency/Party to Complete Form TE-153 through Part H</b>
<b>PennDOT projects</b>	PennDOT staff or their consultants
<b>PennDOT projects with municipal lead</b>	Municipal staff or their consultants, with assistance from PennDOT
<b>Municipal projects</b>	Municipal staff or their consultants
<b>Highway Occupancy Permit (HOP)</b>	HOP Applicant or their consultants

Form TE-153 is located at <http://www.dot.state.pa.us/public/PubsForms/Forms/TE-153.pdf>

Additional guidance for adaptive signal control will be included in future traffic signal publications.

Electronic submissions are preferred and may be sent to [signals@pa.gov](mailto:signals@pa.gov). Should you have any questions regarding this matter, please contact Stephen Gault, P.E., PTOE, Statewide Traffic Signal Operations Engineer, at (717) 787-6988.

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