STRATEGIC PLAN FOR THE
AASHTO Committee on Traffic Engineering
As approved by the Strategic Management Committee, September 22, 2018

Goal 1: Address how the implementation of Connected/Autonomous Vehicles (CAV) and related technologies will impact traffic engineering infrastructure.

Strategy 1: Identify critical CAV issues.
  Action 1: Develop CAV state-of-the-practice document for CTE members.
  Action 2: Identify traffic engineering implementation issues associated with CAV technologies.

Strategy 2: Determine traffic engineering infrastructure and practices needing updates to accommodate CAV technologies.
  Action 1: Identify research needs.
  Action 2: Review research results.
  Action 3: Coordinate with stakeholder groups.
  Action 4: Prepare white paper on traffic engineering and CAV implementation.

Strategy 3: Develop traffic engineering CAV implementation guidelines.
  Action 1: Develop design guidelines/criteria for traffic engineering infrastructure.
  Action 2: Develop MUTCD criteria for traffic control devices used by CAV.

Goal 2: Improve access and safety of non-motorized user groups to member department roadways.

Strategy 1: Promote pedestrian access.
  Action 1: Identify critical pedestrian concerns for member departments and identify needed changes to the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities.

Strategy 2: Promote bicycle access.
  Action 1: Identify critical bicycle concerns for member departments and identify needed changes to the AASHTO Guide for the Development of Bicycle Facilities.

Strategy 3: Promote accessibility for user groups with disabilities.
  Action 1: Develop recommendations for implementing the Public Rights of Way Accessibility Guidelines regulation when published as a final rule.
Strategy 4: Address transit issues within the traffic engineering arena.

Action 1: Work with other AASHTO committees and groups to identify traffic engineering content for the *AASHTO Guide for Geometric Design of Transit Facilities on Highways and Streets*.

Goal 3: Provide resources to member departments related to the use of traffic control devices.

**Strategy 1:** Address the use of rectangular rapid-flashing beacons (RRFB).

Action 1: Develop guidelines for the use of rectangular rapid-flashing beacons.

Action 2: Developing guidelines for the use of innovative flashing rates and patterns in beacons and signals.

**Strategy 2:** Increase member department knowledge of speed control and regulation.

Action 1: Identify existing uses of variable speed limits and develop guidelines for variable speed limits on state highways.

**Strategy 3:** Promote effective management of traffic control device assets and infrastructure

Action 1: Identify existing uses of asset management practices in member departments.

**Strategy 4:** Develop traffic signal timing parameters for member departments.

Action 1: Develop guidelines for signal change and clearance intervals.

**Strategy 5:** Improve traffic signal control strategies.

Action 1: Develop guidelines for adaptive signal control.

**Strategy 6:** Contribute to keeping the MUTCD current and relevant.

Action 1: Work with the NCUTCD to identify opportunities for updating the MUTCD.

**Strategy 7:** Assess benefits of alternative sign alphabets/fonts.

Action 1: Develop recommendations for use of Clearview.

Goal 4: Assess the use of big data/mega data to improve traffic engineering practices.

**Strategy 1:** Identify types of big data with traffic engineering applications.

Action 1: Develop applications and guidelines for utilizing big/meta data.

Goal 5: Prepare and update traffic engineering technical products.

**Strategy 1:** Develop new CTE publications.
Action 1: Clearinghouse of state traffic engineering standard sheets.

Action 2: AASHTO guidelines for signal change and clearance intervals.

Action 3: Case studies of traffic engineering success stories.

**Strategy 2:** Evaluate and revise existing publications that CTE is solely responsible for:


Action 3: Listing of Control Cities for Use in Guide Signs on Interstate Highways (Part III of AASHTO Guidelines for Supplemental Guide Signing). This list is now posted on the CTE website

**Strategy 3:** Evaluate and revise existing publications that CTE contributes to.


**Goal 6:** Maintain five-year planning horizon for traffic engineering technical goals, potentially considering the following strategies among others that are not listed.

**Strategy 1:** Evaluate the impacts of changes in user characteristics and vehicle characteristics on traffic engineering practices.

**Strategy 2:** Evaluate the impacts of advances in technologies on traffic engineering practices, including the use of Intelligent Transportation Systems (ITS).

**Strategy 3:** Evaluate impacts of Complete Streets and related concepts (Livable Communities, Road Diets) on state traffic engineering practices.

**Strategy 4:** Evaluate the impacts of driver distraction and driver impairment on driver performance and system safety and efficiency.

**Strategy 5:** Evaluate the impacts of advertising messages on driver performance and system operation, with consideration of the beneficial aspects of advertising within the right of way.

**Strategy 6:** Evaluate the impacts of changing road user demographics and behavior on traffic engineering practices. Driver demographics continue to change as the country becomes more diverse. Driver behavior is also a concern due to increasing demands for attention within the vehicle. Examples of both include older drivers, younger drivers, English as a second language drivers, driver training and licensing, distracted drivers, impaired drivers. Drivers are increasingly relying upon in-vehicle navigation aids for directions and guidance rather than traditional traffic control devices.
Strategy 7: Differences between rural and urban challenges. Traffic engineering practices and improvements can differ depending upon whether the location is within a rural or urban area. Many traffic engineering challenges and the related actions focus upon urban conditions.

Strategy 8: Impacts of planning and design decisions upon traffic engineering operations. Factors such as horizontal alignment, access management, and pavement design can have a significant impact on the quality of traffic operations.

Goal 7: Identify and develop proposed changes to legislation and regulation at the national level.

Strategy 1: Propose improvements to regulations/laws associated with new and/or revised traffic engineering practices to provide uniformity in legal and regulatory approaches.

Action 1: Flashing yellow and red arrow traffic signal indications.

Action 2: Pedestrian countdown signal indications.

Action 3: Rectangular rapid-flashing beacons.

Action 4: Regulations related to implementation of automated/autonomous vehicles.

Strategy 2: Propose legislation and/or regulation related to incorporating technology into traffic engineering practices and vehicle operations.

Action 1: Provide input on development of performance criteria for traffic control devices used by connected/autonomous vehicles.