NCUTCD Draft Strategic Plan

TECHNICAL COMMITTEE: Edit Committee
ITEM NUMBER: 19A-EDIT-01
TOPIC: NCUTCD Draft Strategic Plan
ORIGIN OF REQUEST: NCUTCD Executive Board
AFFECTED SECTIONS OF MUTCD: None (not related to MUTCD language)

DEVELOPMENT HISTORY:
- Approved by Technical Committee: 01/10/2019
- Approved by NCUTCD Council: 6/20/2019

SUMMARY
The NCUTCD approved a strategic plan for the MUTCD at the January 2014 meeting. During the preparation of the MUTCD strategic plan, the task force identified several issues that were more related to the NCUTCD than to the MUTCD. Accordingly, the Edit Committee established a task force to develop a strategic plan for the NCUTCD.

DISCUSSION
The Strategic Plan Task Force was chaired by P.D. Kiser. Members included: Tom Heydel, Kathy Falk, Harry Campbell, Scott Wainwright, Mark Luszcz, Steve Oliver, Neil Boudreau, Marc Jacobson, Henry Ross and Jonathan Upchurch. The task force developed an initial draft which was reviewed and commented on by members of the Edit Committee and the Executive Board prior to approval by the Edit Committee at the January 2019 meeting.

PROPOSED STRATEGIC PLAN

NCUTCD PURPOSE
The National Committee on Uniform Traffic Control Devices (NCUTCD) is an organization whose purpose is:
- To assist in the development of standards, guides and warrants for traffic control devices (TCDs) and practices used to regulate, warn and guide road users on streets and highways.
- To recommend to the Federal Highway Administration (FHWA) and to other appropriate agencies proposed revisions and interpretations to the Manual on Uniform Traffic Control Devices (MUTCD) and other accepted national standards.
- To develop public and professional awareness of the principles of safe traffic control devices and practices and provide a forum for qualified individuals with diverse backgrounds and viewpoints to exchange professional information.

**NCUTCD MISSION STATEMENT**

The NCUTCD provides recommendations to the FHWA regarding additions or changes to the MUTCD to improve safety and mobility on the nation’s streets and highways, including the interaction with pedestrian, bicycle and rail transportation. The NCUTCD accomplishes this mission through a collaborative process involving sponsoring organizations and other transportation industry stakeholders.

**NCUTCD CORE VALUES**

- Safety – Road user safety is always the primary focus.
- Innovation – Reflect advances in science and technology.
- Uniformity/Consistency – Develop recommendations that provide for uniform and consistent design and application of TCDs based on human factors needs of road users, while recognizing the need for some flexibility in the application of TCDs.
- Equity – Needs of all road users and views of all stakeholder organizations are considered.
- Responsiveness – Develop MUTCD content that considers the needs of the traveling public to respond to TCDs in a safe manner.
- Research – Provides a basis for MUTCD content.

**NCUTCD STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS**

**NCUTCD Strengths:**

- The only independent group focused solely on traffic control devices.
- Supported by a strong group of professional sponsoring organizations, including several national traffic and safety organizations.
- The NCUTCD makes recommendations to the FHWA on all proposed changes to the MUTCD, both those proposed by the FHWA and those initiated by the National Committee.
- FHWA generally appears to consider all NCUTCD recommendations and gives them serious consideration.
- Stability, expertise and organizational knowledge are enhanced by long-term member commitments.
- A 50% + public agency membership requirement on technical committees assures operational agency inputs.

**NCUTCD Weaknesses:**

- Only meets twice per year.
- All volunteer membership (except for Executive Secretary).
- Minimal budget supported only by meeting registration fees and voluntary contributions by sponsoring organizations.
• Difficult to stay current with the rapid pace of change in traffic control device technology.
• Membership has limited turnover over an extended period which can limit input of new ideas.
• No actual control over any of the material in the MUTCD.
• Limited influence over organizations with enforcement powers over traffic control devices.
• Coordination between technical committees needs improvement.
• Difficulty in finding members/associate members for some sponsoring organizations.
• Requirement for 50%+ public agency membership on technical committees prevents some willing participants from becoming members of technical committees.
• There are a limited number of entry level members with traffic and safety engineering experience.

NCUTCD Opportunities:
• Advancement in technologies offers opportunities to improve safety to road users.
• Share technical committee activities to broaden member knowledge within the NCUTCD.
• Pursue new sponsoring organizations that add value and enhance the capabilities of the NCUTCD.
• More use of multi-committee task forces to address specific issues over a short time frame.

NCUTCD Threats:
• Technology and public policy processes are changing how our profession functions and responds. NCUTCD could become less relevant if it fails to respond to changes in the profession and the related environment.
• The FHWA process to update the MUTCD is very lengthy and cumbersome.
• Other groups and/or professionals may view the NCUTCD process as too slow or not relevant to current and future issues and use other means to achieve their specific goals as it relates to traffic control devices.
• Shortage of funding for research to adequately evaluate new ideas and technology for TCDs.
• Connected/Automated Vehicle technologies may, in the future, make certain traffic control device infrastructure obsolete and/or change the way road agencies communicate traffic control information/restrictions; etc. to vehicles.

NCUTCD GOALS, STRATEGIES AND ACTIONS

IMPROVED METHODS OF OPERATION
Goal 1: Improve the function of the NCUTCD by changing the Committee’s methods of operation and conducting business.
Strategy 1: Grow the capabilities of the NCUTCD website to distribute agendas, circulate proposals to sponsors, solicit comments on proposed changes to the MUTCD, and other
functions. This would require a password-protected “Members Only” area of access to the website.

Action 1: Evaluate and update website content periodically based on membership suggestions and website user feedback. Also focus on website structure, i.e. Home, About Us, Content, FAQs and Contact Us.

Action 2: Update the home page so visitors will know the who, what, where, when and why so they know they are in the correct place in the website.

Action 3: Consider ways to make the website load faster (search engine optimization) and improve performance.

Action 4: Periodically check website for errors.

Action 5: Evaluate and update browser compatibility for the website.

Action 6: Secure each page of the website.

Action 7: Upgrade to PHP7 to increase website speed and security (PHP7 is a server-side scripting language designed to generate HTML pages upon request.)

**Strategy 2:** Enhance communication to the membership via a periodic electronic newsletter that keeps members informed of all activities of the NCUTCD. Use the newsletter as a mechanism to maintain interest and enthusiasm between meetings, seek volunteers, and seek input and suggestions.

Action 1: Develop an electronic newsletter that can be easily distributed for NCUTCD member benefit.

Action 2: Determine feasibility of connecting newsletter to NCUTCD members through email or other social media.

**Strategy 3:** Migrate to greater use of electronic communication to conduct business between face-to-face meetings – both for the Council and technical committees.

Action 1: Develop a protocol that allows for the use of electronic communication to conduct business for Council and technical committee business.

Action 2: Allow each Technical Committee Chair access to and training on electronic communication software.

**Strategy 4:** Develop methods for the Council to virtually debate and vote online on items of business when the need arises to accelerate Council actions. Group size in online debating and voting will be a challenge and will need to be considered when setting up a system.

Action 1: Search internet for on-line voting applications that provide secure measures for debating and voting on items by the NCUTCD Council.

Action 2: Evaluate methods to enable NCUTCD Technical Members to participate in the debate but not allow them to vote.

Action 3: Determine the need to change the NCUTCD Bylaws to accommodate virtual debate and online voting, i.e. Sections 5.2, 5.3 and 5.5.

**Strategy 5:** Improve the process for responding to the Federal Register between NCUTCD meetings when the docket deadline does not allow a face-to-face meeting to discuss and debate a recommendation. Fine-tune the process to allow the discussion and debate that will improve the quality of the Committee’s recommendation. A virtual meeting or conference calls are possible ways to accomplish this.

Action 1: Establish a procedure for conducting virtual or conference call meetings to address Federal Register items between NCUTCD meetings.

Action 2: Improve the tracking system for NCUTCD recommended changes.
TECHNOLOGY

Goal 2: Provide clear, concise, timely and research-based recommendations to the FHWA regarding the appropriate use of current and future traffic control devices (TCDs) by engaging a knowledgeable stakeholder base that is adaptable to changing technology.

Strategy 1: The NCUTCD Chair and Technical Committee Chairs should reinforce the need for research results to back up any recommendations for MUTCD changes.

Goal 3: Assess the impacts of advanced technologies on traffic control devices, including Intelligent Transportation Systems (ITS). Be proactive in understanding the traffic control device needs of vehicle technologies to accomplish partial or full vehicle automation and connected vehicle technology.

Strategy 1: Recruit individuals who are developing vehicle automation and connected vehicles to participate in the NCUTCD.

Action 1: Contact NCUTCD members that are involved and/or associated with the vehicle automation industry and solicit their suggestions for viable National Committee member candidates.

Strategy 2: Invite ITS America to become a sponsoring organization.

Action 1: Follow up on the initiative sent in February 2018 to the ITS America board about becoming a sponsoring organization of the NCUTCD.

RESEARCH

Goal 4: Assess the impacts of changing road user demographics and behavior on traffic control devices.

Strategy 1: Determine what specific research would be needed to assess impact of road user demographics and behavior on TCDs.

Action 1: Request the Research Committee, in coordination with FHWA, to develop potential research ideas for assessing the impact of road user demographics and behavior on TCDs.

Goal 5: Promote applicable research on and experimentation with improvements in existing TCDs and implementation of new TCDs.

Strategy 1: Encourage Technical Committee’ Chairs to increase their efforts to develop good ideas for new TCD research to be submitted to the Research Committee.

Strategy 2: Research Committee to refer recent research completed to Technical Committee’s for their action if those research studies are specific to TCDs in that technical committee’s realm.

Strategy 3: 

Strategy 4: Actively pursue and encourage organizations to provide additional research funding for TCDs.

Goal 6: Encourage the Research Committee to create a database on the NCUTCD website presenting TCD research.

Strategy 1: The database would be peer-reviewed by members of the NCUTCD and its purpose would be to advance the state of the art in TCD practice/technologies and identify items for future NCUTCD action.

Action 1: The Research Committee will establish a Research Database Task Force to establish parameters for a research database and consider options (volunteer vs contracted) for implementing the database.
Action 2: Develop the Research Database.

*Strategy 2:* Establish a Task Force to monitor and report on new technology involving existing and/or potential new TCDs.

Action 1: The Task Force will provide information to Technical Committee and Research Committee chairs.

**Goal 7:** Focus on using our extensive human factors expertise to help develop and standardize in-vehicle displays related to traffic control devices. Automated vehicles should react to TCDs according to the Rules of the Road.

*Strategy 1:* Search the NCUTCD membership for individuals with extensive human factors expertise that would be willing to work on in-vehicle display research.

Action 1: Form a task force to develop guidelines for in-vehicle displays. The task force should include members with human factors expertise.

Action 2: The NCUTCD Chair should engage with the National Highway Traffic Safety Administration (NHTSA) and FHWA to foster NHTSA officials’ understanding of the safety importance of standardization of in-vehicle displays, based on human factors, and encourage NHTSA to consider rulemaking on such displays based on research results.

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**STAKEHOLDERS AND SPONSORING ORGANIZATIONS**

**Goal 8:** Continue to build the NCUTCD’s relationship with FHWA to best meet the needs of all road users.

*Strategy 1:* Increase frequency of communication between NCUTCD leadership and FHWA staff.

Action 1: Conduct a series of conference calls and/or meetings between the elected leaders of the NCUTCD and the FHWA MUTCD Team members to determine where improvements can be made in the process to update the MUTCD and other items of mutual interest.

*Strategy 2:* Develop personal relationships between NCUTCD leadership and FHWA leadership at the highest levels.

Action 1: The NCUTCD Chairperson will have regular communication with the FHWA MUTCD Team Leader and develop relationships at higher levels in FHWA, i.e. Associate Administrator for Operations and the FHWA Administrator.

*Strategy 3:* Increased frequency of communication between NCUTCD leadership / staff and sponsoring organization points of contact.

Action 1: The NCUTCD Chairperson will have regular communication with the points of contact representing the sponsoring organizations.

*Strategy 4:* Better utilize the resources and capabilities of the sponsoring organizations to help the NCUTCD carry out its activities.

Action 1: Through closer relationships with sponsoring organizations, identify those resources and capabilities that can help the NCUTCD achieve its goals.

**Goal 9:** Maintain and strengthen the consensus-building process the NCUTCD shares with all stakeholders.

*Strategy 1:* Implement outreach and webinars to reach a variety of MUTCD stakeholders.

Action 1: Establish a task force to explore the most effective way to provide outreach and webinars to reach stakeholders.
Action 2: Take task force recommendations and set up the outreach and webinar program.

Action 3: Develop a members’ only webinar series following each NCUTCD meeting to summarize the items passed at the meeting and the upcoming proposals expected to be sent to sponsors for review. Presentations would need to carefully separate good new guidance that is compatible with the current manual versus items that should wait for rulemaking.

Goal 10: Increase awareness of the NCUTCD throughout the profession.

Strategy 1: Maintain the relevance of the MUTCD to the transportation profession that includes all the state level organizations through a webinar program.

Action 1: Encourage members to promote the NCUTCD through professional societies and other similar venues by giving presentations at meetings/conferences and writing articles for newsletters, blogs, magazines, etc.

Action 2: Promote a basic power point presentation that is available on the NCUTCD website as a basic presentation model that members can modify to their needs.

MEMBERSHIP

Goal 11: Expand and diversify NCUTCD membership.

Strategy 1: Collaborate with sponsors to increase diversity of individuals participating in the NCUTCD in terms of age, gender, ethnicity and areas of expertise.

Action 1: Actively recruit experienced professionals for membership.

Action 2: Instruct each Technical Committee chair to have their committee members submit names of interested individuals that meet membership criteria without bias to age, gender, ethnicity and areas of expertise.

Strategy 2: Encourage participation by individuals with expertise outside those that are represented by current sponsoring organizations.

Action 1: Encourage new individuals to participate on Technical Committees whose expertise may be somewhat related to TCDs but is beyond that in ways that can enhance the committee’s deliberations. For example the Signals Technical Committee recently added an attorney who specializes in tort liability cases involving signal design and operation.

LEADERSHIP

Goal 12: Provide opportunities for all members to thrive in their volunteer roles and to grow and develop within the organization. The NCUTCD has many members with the talent to serve in leadership positions. Offer opportunities for members to serve as leaders of Technical Committees, members of the Executive Board, and Officers.

Strategy 1: Evaluate the pros and cons of periodic rotation of leadership (term limits) for NCUTCD leadership positions and Technical Committee Chairs and implement the findings.

Action 1: Establish a Leadership Task Force to explore and possibly define term limits for all NCUTCD leadership positions.

Strategy 2: Be proactive in identifying future leaders and spread leadership opportunities and responsibilities among the membership.

Action 1: Use the Leadership Task Force to identify potential candidates for leadership positions.
Strategy 3: Work with Technical Committee Chairs, Sponsoring Organizations and others to create a program to identify potential future leaders in the NCUTCD.

Action 1: The Leadership Task Force will work with the Technical Committee Chairs and others to identify potential future leaders.

MUTCD UPDATES

Goal 13: Work with FHWA to streamline the process for making changes to the MUTCD.

Strategy 1: Work closely with FHWA to encourage them to find ways to expedite their rulemaking process. The rulemaking process should be expedited while also preserving the ability of the NCUTCD to provide meaningful comments and input.

Strategy 2: Evaluate options for modernizing the NCUTCD process for updating the MUTCD.

MISCELLANEOUS

Goal 14: Develop a process that would lead to adoption of the “Rules of the Road” (ROR) portion of the Uniform Vehicle Code (UVC) by State DMV Administrators and encourage states to enact laws to conform to the UVC.

Strategy 1: Contact the American Association of Motor Vehicle Administrators (AAMVA) to inform them of NCUTCD’s interests and actions on ROR and seek their assistance.

Action 1: NCUTCD Chair should contact appropriate persons at AAMVA and determine the best way to work with AAMVA (speak at conference, send information, etc.).

Action 2: Continue to promote the June 2010 materials developed for AAMVA that explains NCUTCD’s interest in the ROR portion of the UVC, provide detail on ROR updates NCUTCD has done and what still needs to be done, and seek AAMVA assistance in promoting ROR updates to the 50 State Motor Vehicle Administrators so they can work with their legislatures.