



National Committee on Uniform Traffic Control Devices

12615 West Keystone Drive * Sun City West, AZ, 85375
Telephone (623)680-9592 * e-mail: ncutcd@aol.com

Attachment No. 1
Item No.: 19A-EDIT-01

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: not yet approved

This is a draft strategic plan to guide future actions of the NCUTCD. The NCUTCD is distributing it to its sponsoring organizations for review and comment. Sponsor comments will be considered in revising the draft strategic plan prior to NCUTCD Council consideration.

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 NCUTD 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: XXXX. 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.

- 35 • To recommend to the Federal Highway Administration (FHWA) and to other
36 appropriate agencies proposed revisions and interpretations to the Manual on Uniform
37 Traffic Control Devices (MUTCD) and other accepted national standards.
- 38 • To develop public and professional awareness of the principles of safe traffic control
39 devices and practices and provide a forum for qualified individuals with diverse
40 backgrounds and viewpoints to exchange professional information.

41

42 **NCUTCD MISSION STATEMENT**

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

48

49 **NCUTCD CORE VALUES**

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

60

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

62

63 **NCUTCD Strengths:**

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

76

77 **NCUTCD Weaknesses:**

- 78 • Only meets twice per year.
- 79 • All volunteer membership (except for Executive Secretary).

- 80 • Minimal budget supported only by meeting registration fees and voluntary contributions
81 by sponsoring organizations.
- 82 • Difficult to stay current with the rapid pace of change in traffic control device
83 technology.
- 84 • Membership has limited turnover over an extended period which can limit input of new
85 ideas.
- 86 • No actual control over any of the material in the MUTCD.
- 87 • Limited influence over organizations with enforcement powers over traffic control
88 devices.
- 89 • Coordination between technical committees needs improvement.
- 90 • Difficulty in finding members/associate members for some sponsoring organizations.
- 91 • Requirement for 50%+ public agency membership on technical committees prevents
92 some willing participants from becoming members of technical committees.
- 93 • There are a limited number of entry level members with traffic and safety engineering
94 experience.

95

96 **NCUTCD Opportunities:**

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

104

105 **NCUTCD Threats:**

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

118

119 **NCUTCD GOALS, STRATEGIES AND ACTIONS**

120

121 **IMPROVED METHODS OF OPERATION**

122 **Goal 1:** Improve the function of the NCUTCD by changing the Committee’s methods of
123 operation and conducting business.

124 *Strategy 1:* Grow the capabilities of the NCUTCD website to distribute agendas, circulate
125 proposals to sponsors, solicit comments on proposed changes to the MUTCD, and other
126 functions. This would require a password-protected “Members Only” area of access to
127 the website.

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

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

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

135 Action 4: Periodically check website for errors.

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

137 Action 6: Secure each page of the website.

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

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

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

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

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

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

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

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

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

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

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

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

- 169 Action 1: Establish a procedure for conducting virtual or conference call meetings to
170 address Federal Register items between NCUTCD meetings.
171 Action 2: Action 2: Improve the tracking system for NCUTCD recommended changes.
172

173 TECHNOLOGY

174 **Goal 2:** Provide clear, concise, timely and research-based recommendations to the FHWA
175 regarding the appropriate use of current and future traffic control devices (TCDs) by
176 engaging a knowledgeable stakeholder base that is adaptable to changing technology.
177 *Strategy 1:* The NCUTCD Chair and Technical Committee Chairs should reinforce the need
178 for research results to back up any recommendations for MUTCD changes.

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

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

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

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

189 Action 1: Follow up on the initiative sent in February 2018 to the ITS America board
190 about becoming a sponsoring organization of the NCUTCD.
191

192 RESEARCH

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

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

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

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

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

204 *Strategy 2:* Research Committee to refer recent research completed to Technical
205 Committees for their action if those research studies are specific to TCDs in that
206 technical committees realm.

207 *Strategy 3:* Actively pursue and encourage organizations to provide additional research
208 funding for TCDs.

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

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

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

217 Action 2: Develop the Research Database.

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

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

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

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

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

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

234

235 **STAKEHOLDERS AND SPONSORING ORGANIZATIONS**

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

238 *Strategy 1:* Increased frequency of communication between NCUTCD leadership and
239 FHWA staff.

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

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

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

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

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

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

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

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

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

260 Action 1: Establish a task force to explore the most effective way to provide outreach
261 and webinars to reach stakeholders.

262 Action 2: Take task force recommendations and set up the outreach and webinar
263 program.

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

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

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

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

275 Action 2: Promote a basic power point presentation that is available on the NCUTCD
276 web site as a basic presentation model that members can modify to their needs.
277

278 MEMBERSHIP

279 **Goal 11:** Expand and diversify NCUTCD membership.

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

282 Action 1: Actively recruit experienced professionals for membership.

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

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

288 Action 1: Encourage new individuals to participate on Technical Committees whose
289 expertise may be somewhat related to TCDs but is beyond that in ways that
290 can enhance the committee's deliberations. For example the Signals Technical
291 Committee recently added an attorney who specializes in tort liability cases
292 involving signal design and operation.
293

294 LEADERSHIP

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

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

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

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

306 Action 1: Use the Leadership Task Force to identify potential candidates for leadership
307 positions.

308 *Strategy 3:* Work with Technical Committee Chairs, Sponsoring Organizations and others to
309 create a program to identify potential future leaders in the NCUTCD.

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

312

313 **MUTCD UPDATES**

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

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

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

320

321 **MISCELLANEOUS**

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

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

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

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