



Roundabout Committee

Date: March 4, 2021

Location: Online Meeting (Host: Texas A&M Transportation Institute)

Meeting Minutes

1) Call to Order (Jason Vaughn)

2) Welcome and Introductions (Jason Vaughn)

Number of meeting attendees: 21

3) Committee Chairperson introductions (Jason Vaughn)

Jason introduced the new Roundabout Committee organization format based on the three chairperson positions. Please refer to the attached Organization Plan with the committee minutes email. Jason mentioned that the TexITE Roundabout Committee (TRC) is focusing on roundabout education needs and improving roundabout resources for the next two-year period. He also stated that our statewide committee will develop stronger relationships with the ITE Roundabout Committee and TRB Standing Committee on Roundabouts and other Intersection Design and Control Strategies, which includes coordinating our award process and resources with the ITE Roundabout Committee.

Jason then introduced the TexITE Roundabout Committee's chairpersons:

- *President Committee Chairperson (Jason Vaughn, City of Sugar Land): Oversees committee operations and has the primary task of planning and managing committee meetings (which includes inviting speakers for roundabout presentations). This chairperson also provides reports and updates to the TexITE Board.*
- *Activities Chairperson (Jay VonAhsen, Kimley Horn & Associates): Manages the Awards Subcommittee and Education Subcommittee and related activities. This chairperson also coordinates activity requests (from members) with the Presiding Chairperson and subcommittees.*
- *Data Resources Chairperson (Minh Le, Texas A&M Transportation Institute): Coordinates with the committee's managers for the TexasRoundabouts.com website and TRC Facebook page. This chairperson also manages the committee membership list and related data resource tasks.*
- *Liaison Co-Chairperson (Wade Odell, TxDOT): Coordinates with the ITE Roundabout Committee and the TRB Roundabout & Other Intersection and Design Control Strategies Committee. This chairperson attends the national roundabout committee meetings and provides updates from the national committees to the TRC membership.*

4) Roundabout Mapper Update status (Minh Le)

Minh mentioned that the Roundabout Committee is coordinating with Kittelson & Associates on updating Texas roundabouts in Kittelson's international roundabout mapping database. Our committee thanks the agencies whom provided their roundabout updates a few months ago. We are currently working on data format changes to input our list into the international roundabout database. We are planning to present our updates at a future Roundabout Committee meeting.

Minh also mentioned the roundabout pictures that the committee received from several Texas agencies. The roundabout pictures have been uploaded to the committee website (TexasRoundabouts.com and in the Photo Gallery tab) and the Facebook page (facebook.com/TexITERoundaboutCommittee and in the Photos tab). Our committee thanks the agencies whom provided their roundabout photos.

5) Year 2021 Norman Hogue Roundabout Award announcement (Jay Von Ahsen)

Jay mentioned that the Awards Subcommittee has updated the Norman Hogue Roundabout Award form and submitted the Year 2021 award form to TexITE for membership distribution. Jay stated that the 2021 award form includes requests for a location map, path overlap information, and an additional information field for crash data. Jay also stated that the award form and submittals are due to the TexITE Awards Coordinator by May 15, 2021.

Please refer to the attached Year 2021 Norman Hogue Roundabout of the Year Award form attached to the minutes email. The award form is also available at <http://texasroundabouts.com/wp-content/uploads/2021/03/2021-Norman-Hogue-Roundabout-of-the-Year-Award-Submittal-Form.pdf>. Jay mentioned that the award is dedicated to Norman Hogue, our roundabout colleague and friend to several committee members and former Roundabout Committee chairperson whom passed away suddenly in Fall 2018. Jason mentioned that he has also distributed the 2021 award form to several Texas cities with known roundabouts. Jay and Jason are encouraging the TexITE Roundabout Committee members to coordinate with agencies whom have roundabouts and see if they can submit award forms. If you have any questions about the award form, please do not hesitate to contact Jay VonAhsen (jay.vonahsen@kimley-horn.com) or Jason (832-692-4078).

6) TRB Annual Meeting – Roundabout and Other Intersection Design and Control Strategies Committee Update (Wade Odell)

Wade provided updates from the January meeting for the Roundabout and Other Intersection Design and Control Strategies Committee, held at the Transportation Research Board (TRB) virtual meeting on January 13, 2021. He stated that TRB recently downsized the number of standing technical committees from 220 to the current 176 standing committees. Wade said that TRB has scheduled next year's meeting between January 9-13, 2022. Wade also discussed with Abram Van Elswyk, whom is currently managing the TRB Roundabout Website and looking for a volunteer to manage the website.

Wade then mentioned that the International Roundabout Conference is rescheduled for May 2022 in Monterey, California. The conference was cancelled last year due to the COVID pandemic, but planning has started for next year's conference. Wade mentioned that the TRB Roundabout Committee requests roundabout webinar topics for this year, and members can contact Wade on the topic submittal page. He also said that the committee is planning to schedule a roundabouts and trucks webinar within the next month.

Wade mentioned reports from several locations and committees. Canada has an upcoming roundabout conference and Spain opened three new turbo roundabouts. Ken Sides with the ITE Roundabout Committee reported that they will be developing a roundabout action plan, and AASHTO plans to include roundabouts in the multimodal updates to the Green Book. In addition, TRB is planning to hold the 6th International Symposium on Highway Geometric Design in Amsterdam on June 26-29, 2022.

7) Upcoming Meetings (Jason Vaughn)

- a) Next Roundabout Committee online meeting (July 2021)
- b) TexITE & ITS Texas Joint Meeting (Dallas area, October or November 2021)

8) Presentation: Marcus Brewer, P.E., PMP, Texas A&M Transportation Institute

- "Update on TxDOT Research Project 0-7036"

Jason introduced Marcus Brewer, who is a Research Engineer and serves as Director of Workforce Development at TTI in College Station. Marcus has 20 years of experience in TTI's Roadway Design Program on topics including geometric design, roadway and roadside safety, pedestrian mobility, and operation effects of geometrics.

Marcus introduced TTI's current TxDOT-sponsored research project on the "Use of Roundabouts and Innovative Intersection Designs at High-Speed Intersection in Texas." The project started in August 2019 and is anticipated to complete next year. Marcus discussed the roundabout portion of the project, which includes data collection at roundabouts with oversize – overweight (OSOW) vehicles and located in rural Texas or elsewhere and design guidelines development from analyses of these roundabouts.

Marcus mentioned that TTI documented the state of practices and developed preliminary design guidelines. With the use of the Kittelson roundabout database and related resources, TTI identified 15 states with roundabouts at high speed locations and further examined locations with high OSOW volumes. TTI utilized NCHRP 672 for design guidance and identified three states (Kansas, Washington, and Wisconsin) whom have roundabout guidance for high-speed and high OSOW volumes locations. Marcus mentioned that they examined key design guidance features, which includes balancing low circulating speeds with high approach speeds, design vehicle selection, speed reduction elements like extended splitter islands, larger central islands, and supplemental traffic control devices and lighting.

TTI is currently conducting field studies and operational and safety analyses. To locate existing sites, they used the following desired criteria: rural or suburban locations, at least one approach with a 45 mph or higher posted speed limit, and a high demand of large / OSOW vehicles. Marcus mentioned that TTI identified 189 roundabouts in Texas from the Kittelson online database. They then located eight (8) roundabouts had at least one approach with a 45 mph or higher posted speed, and six (6) roundabouts with a five percent or more truck volume. TTI selected the I-45 and FM 1375 interchange roundabouts in New Waverly and the Cane Island roundabout in Katy respectively for the local data collection.

Marcus discussed the two methods considered for field data collection. The current method involves using video, tubes, photographs, aerial mapping, and field notes. However, this method is not very feasible when analyzing roundabouts in other states (during COVID travel conditions). Therefore, TTI considered a new technical method of using drones for data collection with algorithmic processing and reduction. TTI determined that the drone data collection method was more portable, and they had located a third-party vendor with the certifications for this data collection process.

TTI completed standard data collection at the Katy roundabout location and are awaiting the end of construction for the New Waverly roundabouts before scheduling data collection at this location. They conducted drone data collection for two sites in Kansas and have also considered qualified sites in Missouri, North Carolina, and Wisconsin. Once TTI completes field data collection, they will refine the preliminary guidance and develop summary brochures and webinar content.

9) Adjourn

- a) For comments or questions, contact Jason Vaughn at:
832-692-4078 or jvaughn@sugarlandtx.gov