1. Scheduled for Monday, January 14, 2019 from 8:00 am – 9:45 am in Marriott Marquis Liberty K room (M4)

2. Past year activities:
   a. TRB 2018: Co-sponsored (with ABJ-60) and led Monday 8 am lectern session on “Applications of Unmanned Aerial Systems to Help with Infrastructure”. Four presentations.
      i. The workshops were co-sponsored by AV000 (Aviation Group), ABJ50, and ABJ60
      ii. Included 13 of 16 presentations with information on UAS regulations, sensor technologies, applications, DOT user experiences, data quality, and education.
      iii. About 40 attendees in morning, afternoon sessions
      i. Guohui Zhang, U.Hawaii managed paper reviews – “We received 58 papers (15 for presentation only, 3 for publication only, and 40 for both presentation and publication), among which 29 out of 55 papers (about 52%) are considered for presentation, and 9 out of 43 papers (about 21%) are considered for publication.” (In 2018 we had 47 papers & in 2017 it was 46).
   e. Web page continued to be updated (UAS workshop info listed) at http://www.abj50.org/subcommittees/sensing-technologies/

3. This year’s Sensing Technologies Subcommittee meeting
   a. 9 attendees
   b. What is our niche?
      i. NDT technologies / remote sensing
      ii. Embedded sensors
      iii. Connected vehicle sensors
      iv. UAS-enabled sensing
      v. Traffic monitoring
   c. Comments: Private sector doesn’t really know that this kind of workshop & committee exist – participation would be “easy”.
      1. Technologies are changing rapidly – GPR, LiDAR – hard for practitioners to keep up
      2. Vendors want to be pro-active, get information about them & their technologies
      3. Agencies & vendors need to know more about each others’ interests
      4. What to do with outputs? How to use them?
      5. Sensors are cheaper – what to with them?
   ii. Help share information on new technologies
      1. Technologies:
         a. GPR
         b. LiDAR
         c. Multispectral/hyperspectral
         d. Thermal
2. Platforms
   a. Drones / UAS

3. Applications
   a. Traffic monitoring
   b. Bridge condition assessment
   c. Measuring friction – contact measurement – alternatives to tire contact measurement - measure of microtexture – at traffic speed – at least 1/10 mm – mhz rate
   d. Need to find more volunteers to help with subcommittee activities

4. Priorities for the next year?
      i. RNS – “Guidelines for non-destructive sensing for traffic management” - Richard Li (U.Louisville) – comparison of different available technologies – Bluetooth, Wifi, radar, LiDAR, video, CAV – which one(s) are most appropriate – make a new push on this RNS
      ii. 2018 one – “Evaluating and implementing unmanned aerial systems (UAS) into bridge inspection and management methods” – C.Brooks lead - being considered through AHD35, AASHTO COBS & - needs to be formally evaluated & selected as priority for a RFP through AASHTO process
         1. There’s a definite need for standards on use of UAS in bridge inspection
         2. AASHTO (users), ASTM (vendors), ANSI (new 2018 roadmap)
      iii. “Determining pavement surface friction properties in a non-contact method at traffic speed” – John Andrews, MDOT-SHA (Maryland) – new idea
   b. Workshop? – committee level discussion?
      i. More opportunities for interaction
      ii. Mix with another topic – like VR
      iii. Have technologies available for “hands-on”
      iv. Topic themes:
         1. UAS technologies advances
         2. Cutting-edge technologies for remote sensing
         3. Traffic management technologies
         4. How are sensing data processed & integrated into end use
   d. Webinar? Discussed for past two years, but need someone to take the lead. New topics?
      i. Jarlath O’Neil-Dunne, U.Vermont (Aug. 19, 2018 Google Group message) – “I would be happy to sign up for one that focuses on the organizational challenges of implementing UAS technology.”
         1. Cristian Druta – VTTI interest
      ii. Yu Yan, Senses Global Labs (Dec. 11, 2018 Google Group message) – “If you are interested in having a webinar on VR/AR for Transportation in 2019, I can help. I am serving as the Chair of IEEE VR/AR Working Group, the Chair of IEEE VR/AR Advisory Board, as well as the Chair of IEEE Standards Coordinating Committee on Transportation. My committees could assist with the webinar by providing speakers and content. Thanks a lot.”
         1. Integrate other VR/AR work being done at Universities & DOTs as well
         2. Differentiate from other recent VR webinar
         3. Devin Harris (UVA) interest