Welcome and Review of Minutes (Capt. Bloom)

Meeting Start 10:01 a.m.

The subcommittee reviewed the minutes from the previous meeting.

Jebediah Doran stated that the minutes did not adequately capture the discussion of defining testing and deployment or the request to receive information about other states’ policy around crash reporting data.

Capt. Bloom directed the subcommittee to focus on testing requirements and law enforcement interaction in this meeting.

Testing Requirements

Lt. Tannenbaum reminded that this group can they can make recommendations to the Subcommittee on Licensing and Registration for their consideration. He asked if the subcommittee wanted to make any suggestions about the driver background check aspect of the testing permit process being recommended by the Subcommittee on Licensing and Registration.

Capt. Bloom and Jebediah Doran expressed support for a simple requirement that operators commit to meet all applicable state laws regarding traffic violations as part of the permitting process.

Law Enforcement Training and Engagement
The subcommittee discussed requiring a law enforcement interaction plan from entities testing automated vehicles.

Lt. Tannenbaum said that notice of testing and the ability to interdict automated vehicles would be important to law enforcement.

Commissioner Leiken thought that having a plan for law enforcement in a testing permit scheme would help assuage the public’s concerns about safety.

Jebediah Doran raised the possibility of requiring automatic crash notification technology in AVs. Lt. Tannenbaum agreed this would be desirable, but the subcommittee decided to table the topic until addressing crash reporting at the next subcommittee meeting on July 25.

The subcommittee considered California’s model for a law enforcement interaction plan.

Commissioner Leiken spoke about the importance of creating a “living document” which could be revisited and revised to account for changing technology and societal expectations.

Daniel Fernández wanted to make sure that submitting a law enforcement plan would not be unnecessarily burdensome to industry. He was comfortable with a plan that could be updated and renewed annually. He said he was not concerned with the requirement in the California model and was in favor of consistency among states.

Capt. Bloom felt a yearly interaction plan was a good idea, but suggested a note that a manufacturer would be required to submit notification if they made substantial upgrades to the capabilities of their vehicles.

Lt. Tannenbaum voiced his primary concern about making sure law enforcement officers would have the knowledge they needed to safely and quickly remove a crashed or stopped automated vehicle from a highway.

Daniel Fernández noted he had not seen any examples of training provided by manufacturers to law enforcement officers or first responders.

Capt. Bloom did not think it was necessary to have industry provide trainings for law enforcement and first responders; instead, the need for new officer training and education could be addressed through short training bulletins or presentations that law enforcement could distribute. She suggested that law enforcement agencies could even create their own training material based on interaction plans.

The subcommittee asked ODOT staff to provide an example of a law enforcement interaction plan from California, if possible.

The subcommittee agreed to recommend requiring a law enforcement interaction plan, including all the elements in the California model except for their requirement that the plan be reviewed and updated on a yearly basis. The subcommittee suggested that the schedule
and requirements for renewing the interaction plan be determined by the Subcommittee on Licensing and Registration.

**Vehicle Identification**

The subcommittee addressed the issues of marking or labeling automated test vehicles. Capt. Bloom reiterated her idea from the previous meeting about requiring a small decal. Lt. Tannenbaum and Capt. Bloom explained that such a decal would be valuable for police departments with fewer resources and for officers in situations without the time to look up vehicle information.

Daniel Fernández spoke about manufacturers’ concerns that other motorists might behave differently around AVs or even target AVs if the testing vehicles were easily identifiable. Lt. Tannenbaum and Capt. Bloom acknowledged this concern and suggested that the decal could be small and identifiable only to law enforcement.

The subcommittee voted unanimously to recommend that automated vehicles be marked on the rear of the vehicle for easy identification by law enforcement officers as part of the testing permit process. The subcommittee declined to recommend the specific nature or size of the marking, but suggested it be relatively small and discreet.

**Driver Responsibilities**

Jebediah Doran suggested the subcommittee recommend that the Subcommittee on Licensing and registration address the definition of an “operator.”

Lt. Tannenbaum felt that no change in the definition was needed for a testing framework. He felt it would be adequate as long as testers commit to stay within the law and meet their obligations under their testing permit.

Jebediah Doran suggested the subcommittee consider the Tennessee law altering the definition of operator for motor vehicles.

Ali Lohman mentioned that the DMV has identified laws that might need to be adjusted for automated vehicles, and would prefer to add a new section to the vehicle code to cover autonomous vehicles rather than alter existing law too heavily. She noted the Society of Automotive Engineers (SAE) has created definitions for different types of operators, which were discussed and distributed to the task force at the workshop in May.

Capt. Bloom said it would be important for definitions about operators to be included in the task force’s recommendations.

The subcommittee decided to recommend that the Subcommittee on Licensing and Registration consider reviewing the definition of “operator” and keep the Tennessee example in mind.
Public Comment
None

Recap and Next Steps
The Subcommittee decided on the following recommendations:

Subcommittee Recommendations:

1) During testing, AV manufacturers must have a law enforcement/first responder interaction plan.
   
   a. That plan should, at a minimum, consist of the following:
      i. How to communicate with a remote operator;
      ii. Where in the vehicle to obtain owner information, vehicle registration, and proof of insurance;
      iii. How to safely remove the vehicle from the roadway;
      iv. How to recognize whether the vehicle is in autonomous mode;
      v. If possible, how to safely disengage autonomous mode;
      vi. How to detect and ensure that autonomous mode has been deactivated;
      vii. When applicable, how to safely interact with hybrid and electric vehicles; and
      viii. A description of the operational design domain of the vehicle.

2) The state should require that AV manufacturers display a visible and identifiable decal for law enforcement on the rear of automated vehicles, indicating that they are automated. Consideration should be given to ensuring that the decals are discreet in order to protect the automated vehicles from being targeted.

3) Recommendation should be given to the Subcommittee on Licensing and Registration to include both recommendations above as part of any required AV manufacturer testing/permitting process

4) Recommendation should be given to the Subcommittee on Licensing and Registration to consider reviewing the definition of an “operator” and provide Tennessee re-definition as an example

Administrative Concerns:

1) ODOT will amend the minutes from the June 6 subcommittee meeting to better reflect the conversation about the distinction between “testing” and “deployment.”

2) Daniel Fernández will research and report back to the subcommittee with information about automatic crash notifications.

3) If possible, ODOT will provide subcommittee members an example of a Law Enforcement Interaction Plan (or something similar) currently in use by another state, preferably California.
4) ODOT staff will research how law enforcement officers and other first responders are able to recognize that an AV is in autonomous mode, as required by the California law enforcement interaction plan.

5) ODOT staff will provide research about crash reporting requirements in other states.

6) Daniel Fernández and ODOT staff will research if there is any precedent for law enforcement being able to remotely disable an automated vehicle.

End 11:30 a.m.

Areas for Further Discussion

Crash reporting requirements.