Vermont Automated Vehicle Testing Permit

GUIDANCE AND APPLICATION

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TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 BACKGROUND 1

2.1 Vermont's Automated Vehicle Testing Act 1

3.0 AUTOMATED VEHICLE PERMIT PROCESS AND MANAGEMENT 5

3.1 Automated Vehicle Testing Permit Application and Review Process 5

3.2 Municipal Pre-approval of AV Testing on Class 2, 3 and 4 Town Highways 7

3.3 Modifications to Testing Permit 7

3.4 Temporarily Restricting Testing 8

3.5 Suspension or Revocation of Authorization 8

3.6 Periodic Test Results Reporting 8

3.7 Crash Protocol 10

3.8 VT Public Records Act Applicability and Exemptions 11

4.0 PERMIT APPLICATION INSTRUCTIONS AND INFORMATION REQUIRED. 13

4.1 Permit Application Cover Letter 13

4.2 Applicant Information 13

4.3 Testing Partners 13

4.4 Vehicle Information 13

4.5 Automated Driving System Information 14

4.6 Test Vehicle Operator Information 14

4.7 Testing Plan 15

4.8 Safety and Risk Management Plan 15

4.9 First Responder Interaction Plan 17

4.10 Operational Demonstration 18

4.11 Modifications to State and Town Highways 18

4.12 Applicant Acknowledgements (Attachment 2) 18

4.13 Standard Permit Conditions (Attachment 3) 18

4.14 Confidential Information Attachment 19

4.15 Insurance 19

5.0 GLOSSARY OF TERMS 21

6.0 ATTACHMENT 1: CONTACTS 23

7.0 ATTACHMENT 2: CERTIFICATION CHECK LIST 24

8.0 ATTACHMENT 3: STANDARD PERMIT CONDITIONS 26

9.0 ATTACHMENT 4: MUNICIPALITIES WITH PREAPPROVED AV TESTING 28

10.0 EXAMPLE MUNICIPAL TESTING APPROVAL RESOLUTION 29

1.0 INTRODUCTION

This document describes the process and information required to receive a permit to test automated vehicles on state and town highways in Vermont. The Guide is intended for use by entities that are seeking a permit to test automated vehicles on public roads in Vermont (Applicant) and municipalities that are considering allowing testing on town highways under their jurisdiction. It will also serve as a guide to the Vermont Traffic Committee, whose approval is required for all automated vehicle test permits in the state, in its consideration of permit applications. The Guide describes goals for testing in Vermont and may also be useful to members of the public and other stakeholders that participate in the permitting process.

2.0 BACKGROUND

This section provides background information on Vermont's Automated Vehicle Testing Act, general information about automated vehicle technology, and highlights the major roles of the Vermont Agency of Transportation (AOT), municipalities and entities that are seeking a permit to test automated vehicles on public highways in Vermont.

2.1 Vermont's Automated Vehicle Testing Act

The Automated Vehicle Testing Act ("the Act") was passed by the Vermont General Assembly and signed into law by Governor Scott on June 14, 2019 (23 VSA Chapter 41). It creates a permitting process to allow the testing of automated vehicles, often referred to as self-driving cars, on state and town highways in Vermont. A testing permit is required from the Traffic Committee, consisting of the Secretary of Transportation, Commissioner of Motor Vehicles and Commissioner of Public Safety. The Traffic Committee is authorized to issue automated vehicle testing permits for the entire state highway system, class 1 town highways which are the continuation of US and state numbered routes through municipalities, and class 2, 3 and 4 town highways (as defined in 19 V.S.A. § 302) in municipalities that have pre-approved testing on their roads.

As defined in the Act, an automated vehicle is equipped with an Automated Driving System (ADS) that enables it to operate in a sustained fashion with little to no human assistance. An ADS may use cameras, radar, lidar GPS, computer vision and on-board software to sense and evaluate the surroundings. When engaged, an ADS is expected to carry out the real-time dynamic driving tasks required to operate a vehicle in on-road traffic. An ADS should be able to safely steer, accelerate, and decelerate, monitor the surrounding environment, and identify and react to events and objects.

To help describe the evolving nature of automated driving technology, the Society of Automotive Engineers (SAE) defined the five levels of automation shown below that vary based on: the dynamic driving tasks performed; whether a human operator or the ADS is responsible for achieving a minimal risk condition if the system disengages (fallback); and its operational design domain generally defined as the geographical, time-of-day, weather, and roadway and

area characteristics under which the ADS is designed to operate[1]. Pursuant to the Act, a permit from the Vermont Traffic Committee is required to test vehicles on state and town highways with level 3, 4 or 5 automation.[2]

Figure 1: Summary of Levels of Driving Automation[3]

Level	Name	Narrative definition	DDT		DDT fallback	ODD
			Sustained lateral and longitudinal vehicle motion control	*OEDR*		
Driver* performs part or all of the *DDT						
0	**No Driving Automation**	The performance by the *driver* of the entire *DDT*, even when enhanced by *active safety systems*.	*Driver*	*Driver*	*Driver*	n/a
1	**Driver Assistance**	The *sustained* and *ODD*-specific execution by a *driving automation system* of either the *lateral* or the *longitudinal vehicle motion control* subtask of the DDT (but not both simultaneously) with the expectation that the *driver* performs the remainder of the *DDT*.	*Driver* and *System*	*Driver*	*Driver*	Limited
2	**Partial Driving Automation**	The *sustained* and *ODD*-specific execution by a *driving automation system* of both the *lateral* and *longitudinal vehicle motion control* subtasks of the *DDT* with the expectation that the *driver* completes the *OEDR* subtask and *supervises* the *driving automation system*.	***System***	*Driver*	*Driver*	Limited
***ADS* ("*System*") performs the entire *DDT* (while engaged)**						
3	**Conditional Driving Automation**	The *sustained* and *ODD*-specific performance by an *ADS* of the entire DDT with the expectation that the *DDT fallback-ready user* is *receptive* to *ADS*-issued *requests to intervene*, as well as to *DDT performance-relevant system failures* in other *vehicle* systems, and will respond appropriately.	*System*	***System***	*Fallback-ready user (becomes the driver during fallback)*	Limited
4	**High Driving Automation**	The *sustained* and *ODD*-specific performance by an *ADS* of the entire *DDT* and *DDT fallback* without any expectation that a *user* will respond to a *request to intervene*.	*System*	*System*	***System***	Limited
5	**Full Driving Automation**	The *sustained* and unconditional (i.e., not *ODD*-specific) performance by an *ADS* of the entire *DDT* and *DDT fallback* without any expectation that a *user* will respond to a *request to intervene*.	*System*	*System*	*System*	**Unlimited**

OEDR – Object or Event Detection and Response

[1] The SAE Levels of Automation have been adopted by the National Highway Traffic Safety Administration through the Federal Automated Vehicles Policy

[2] The Act's definition of ADS does not refer to the SAE levels but does use the functional definitions such as dynamic driving tasks, operational design domain, and minimal risk condition on which the SAE levels 3, 4 and 5 are based.

[3] SAE J3016 Recommended Practice, Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, June 2018

The following references provide additional information about automated vehicles:

Preparing for Automated Vehicles in Vermont, A Report to the Vermont General Assembly https://legislature.vermont.gov/assets/Legislative-Reports/2017-Act-38-Sec-15-Automated-Vehicles-Report-to-Legislature-Jan-15-2018.pdf

National Highway Traffic Safety Administration https://www.nhtsa.gov/technology-innovation/automated-vehicles-safety

National League of Cities Autonomous Vehicle Pilots Across America, 2018. https://www.nlc.org/sites/default/files/2018-10/AV%20MAG%20Web.pdf

National Association of Counties. Connected and Automated Vehicle Tool Kit. https://www.naco.org/resources/featured/connected-autonomous-vehiclestoolkit#link-1

The Act defines the roles and responsibilities in the permitting process for state government and municipalities, which have jurisdiction over most public roads in Vermont[1], and automated vehicle Applicants applying for an automated vehicle test permit. The major roles and responsibilities of each party are summarized below with more detail provided in subsequent sections of the guidance.

State Role in Testing of Automated Vehicles

- The Vermont Traffic Committee has the sole authority to approve, deny, modify or terminate an Automated Vehicle Testing Permit on all state highways and Class 1 Town Highways, and all other town highways in municipalities that have pre-approved testing on their class 2, 3 and 4 town highways within the State of Vermont.
- The Traffic Committee is required to conduct a hearing per Vermont's Open Meeting Law (1 V.S.A. §§ 310-314) before deciding on an Automated Vehicle Testing Permit Application. Municipalities where testing is proposed must be notified 60 days prior to the hearing. A public hearing is also required for material changes to an approved permit.
- The Vermont Agency of Transportation (VTrans) provides staff support and technical expertise to the Traffic Committee and administers the permitting process.
- VTrans is required to maintain and publish in this Automated Vehicle Testing Permit Guideline a list of municipalities that have pre-approved testing on class 2, 3 and 4 town highways.
- VTrans written approval is required for modifications to state highways that are proposed in a test permit application. However, VTrans is not responsible for implementing the roadway modifications or other infrastructure to accommodate a test, or for any costs related to conducting the test.

Municipal Role in Testing of Automated Vehicles

- It is up to the discretion of municipalities to determine if they want to allow testing of automated vehicles on their Class 2, 3 and 4 town highways. The decision to pre-approve testing must be made at a duly warned meeting of the Selectboard, City Council, Village Trustees, or other elected legislative body.

[1] The Act is not applicable to roads located on federal lands.

- Municipalities can identify and "pre-approve" specific Class 2, 3 or 4 town highways to make available for the testing of automated vehicles.
- Municipalities can offer comments on specific automated vehicle test permit applications through the Traffic Committee hearing process, but municipal approval of specific test permit applications is not required by the Act. However, the Act does allow a municipality to revoke or modify the conditions of its pre-approval at any time by submitting a letter to the Vermont Secretary of Transportation.
    - Municipal approval is required for modifications to class 1,2, 3 and 4 town highway that are proposed in a test permit application. However, municipalities are not responsible for implementing roadway modifications or other infrastructure to accommodate a test, or for any costs related to conducting the test.
- Municipalities, including local law enforcement and emergency responders, are not responsible for monitoring an automated vehicle test.
- The standard permit conditions in Section 8.0 describe the indemnification provided for municipalities.

Generalized list of Applicant Responsibilities

- A human Test Vehicle Operator must be in the driver's seat and be able to take physical control of the test vehicle.
- The Test Vehicle Operator in the test vehicle must be at least 21 years old, pass a background check and cannot have blood alcohol concentration that exceeds 0.02 while operating the test vehicle.
- $5 Million Liability Insurance must be provided.
- The ADS being tested must be able to comply with all state and local traffic laws, and with federal laws unless a written exemption has been received from the National Highway Traffic Safety Administration and shared with VTrans as part of the application for testing.
- The testing vehicle must be clearly identifiable to the public for law enforcement coordination and to promote public education and understanding.
- Applicants must meet the same requirements for testing on state and town highways.
- Unless otherwise agreed to by the Agency of Transportation and municipalities, the cost and implementation of infrastructure modifications that may be necessary to support a test is the responsibility of the Applicant. Additional state and local permits may be required for specific changes to highway infrastructure.

The Applicant will also be responsible for addressing information required in the application such as their experience with automated vehicles, a safety plan, a testing plan, first responder interaction plan, a summary of Test Vehicle Operator training and operations protocols, and accurate and sufficient information on the vehicles being tested.

3.0 AUTOMATED VEHICLE PERMIT PROCESS AND MANAGEMENT

This section describes the steps in the permitting process, how to apply and how permits can be modified, suspended, or revoked. Additional information is provided on how municipalities can pre-approve testing on the local roads under their jurisdiction. Requirements for periodic test results reporting are described as well as the reporting required for crashes that involve a test vehicle. Because all public records of public agencies are subject to the Vermont Access to Public Records Law, this section also outlines the Agency's process relating to public records requests.

Submission of an Automated Vehicle Permit application does not guarantee a right to test an automated vehicle on public roads in Vermont. Any and all costs associated with the preparation and filing of the permit application will be the responsibility of the Applicant.

3.1 Automated Vehicle Testing Permit Application and Review Process

To apply for a permit to test automated vehicles on state and town highways in Vermont, Applicants must submit a cover letter to the AOT Permit Coordinator (see Attachment 1 for contact information) that requests a permit and provides an overview of the proposed testing activities. The AOT Permit Coordinator is the one point of contact throughout the Application process. A narrative with supporting information that addresses the required information described in Section 4.0 must be attached to the cover letter. The combined cover letter, narrative and supporting information constitute an application. The application should be no more than twenty-five (25) pages. The applicant may and is encouraged to include supplemental information to support the application, but any pertinent information or summaries of applicable information should be included in the 25 page application to allow AOT to make a decision on the application based on the information requested in accordance with this guidance.

The application submission and review process will follow these general steps:

1. Prior to submitting an AV Testing Permit Application, Applicants are encouraged to meet with AOT staff to discuss their proposal and goals for testing. Meeting participants may include AOT staff from the Highway Division, Policy & Planning Division and Department of Motor Vehicles as well as representatives from the State Police and affected municipalities and their Regional Planning Commissions.
2. Upon receiving the AV Testing Permit Application, the AOT Permit Coordinator will complete an initial sufficiency review within ten (10) working days to confirm an application has all items requested. If the Permit Coordinator determines that the request is incomplete, the Applicant will be notified in writing with a description of the additional information required. The Applicant may be requested to submit a revised Automated Vehicle Testing Permit Application that addresses comments from the initial completion review.
3. Upon determining that the application has all information requested, the AOT Permit Coordinator, in consultation with the DMV, State Police, and other subject matter experts, will verify that the information provided is complete. If the Permit Coordinator determines that the request is incomplete, the Applicant will be notified in writing with a description of the additional information required. The Applicant may be requested to submit a revised

Automated Vehicle Testing Permit Application that addresses comments from the completion review with applicable agencies.

4. Once a completed AV Testing Permit Application has been submitted and accepted, the AOT Permit Coordinator will notify affected municipalities and Regional Planning Commissions and schedule a public hearing of the Traffic Committee no sooner than 60 days after notifying the affected municipalities. Any timely comments on the testing application will be taken into consideration. VTrans will advertise the hearing consistent with the requirements of the Vermont Open Meeting Law, 1 V.S.A §§310-314
5. The Permit Coordinator will consult with DMV, State Police and AOT subject matter experts to develop a staff recommendation regarding approval of a test permit application for consideration by the Traffic Committee. The Permit Coordinator will also seek comments from affected municipalities. The staff recommendation will be made available to the Applicant, municipalities and other interested parties prior to the Traffic Committee hearing.
6. During the hearing, the Applicant will be given an opportunity to describe the proposed test. Members of the Traffic Committee, municipalities and the public will be given the opportunity to ask questions and make comments for consideration by the Traffic Committee in its deliberation on permit approval and any related permit conditions. The Traffic Committee may enter into executive session as described in Section 3.8 to hear information from the Applicant that is exempt from the VT Public Record Act.
7. In general, the Traffic Committee has three decision options: (1) approve the application as submitted, (2) approve the application with supplemental conditions; and (3) deny the application. All three members of the Traffic Committee, or their designees, must be present in-person or via teleconference to hold a vote on an Automated Vehicle Test Permit Application. A simple majority of two votes is required to formalize a decision. The Traffic Committee can issue its decision at the hearing or provide additional time for written comments or additional information to be submitted. If the Traffic Committee decides to provide time for the submission of written comments, it will make a good faith effort to issue its decision within 30 calendar days of the written comment deadline.
8. The AOT Permit Coordinator will make approved automated vehicle test permits readily available to law enforcement and municipalities within the geographic scope of the operational design domain designated in the permit.

An approved permit will be valid for two (2) years unless revoked or suspended. At least ninety (90) days before the expiration of such two-year period, AOT and the Permittee will meet to discuss renewal of the permit. We are interested in feedback from Applicant on areas for improvement, etc. Feedback from the Applicant and the following items will be considered in the decision about renewal:

1. Safety (i.e. no major crashes attributed to the ADS)
2. Applicant's compliance with terms and conditions of the present permit
3. Cooperation and transparency throughout the testing process
4. Comments from municipal officials in which testing was conducted
5. Public concerns and complaints resolved and un-resolved

3.2 Municipal Pre-approval of AV Testing on Class 2, 3 and 4 Town Highways

Most public highways in Vermont (about 11,000 of 14,000 miles) are under the jurisdiction of municipalities. Town highways are designated as class 1, 2, 3 or 4 which are defined in 19 V.S.A. § 302. Under the Act, the Traffic Committee has the authority to approve automated vehicle testing on all state highways and class 1 town highways, which form the extension of a state highway through a municipality. The Traffic Committee is authorized to approve automated vehicle testing on class 2, 3 and 4 town highways only if the legislative body of a municipality has pre-approved testing.

Municipal pre-approval is not a permit to test automated vehicles. Only the Traffic Committee has the authority to issue permits for specific tests. The intent of establishing municipal pre-approval is to proactively identify municipalities that are willing to allow testing on their roads so that testing permit applicants will know where testing of automated vehicles is welcomed on town highways before they develop testing plans and apply for a permit. Municipalities can indicate pre-approval by passing the "Municipal Testing Approval Resolution" in Attachment 4, or something similar, at a duly warned meeting of the legislative body. The resolution is provided as an example and municipalities may want to make changes or review it with their municipal attorney.

The Act requires the Agency of Transportation in consultation with Vermont's eleven regional planning commissions to identify the municipalities that have pre-approved automated vehicle testing. Towards this end, the Agency of Transportation is available to meet with any Regional Planning Commission and municipality that is willing to consider pre-approval and is providing outreach and education to local officials through a variety of mechanisms.

While Applicants are not responsible for seeking pre-approval from a municipality, they may find it beneficial to work directly with a municipality in advance of submitting a permit application when town highways are a critical part of a testing plan and are certainly free to do so. VTrans is available to participate in conversations with municipalities.

3.3 Modifications to Testing Permit

After receiving an approved AV Testing Permit, the Applicant shall electronically notify the AOT Permit Coordinator (see Attachment 1) if there are material changes in the testing plan or if there are material modifications to the test's operational design domain such that the submitted AV Testing Permit Application and approved AV Testing Permit no longer accurately or adequately describes the scope of the testing program.

Examples of material modifications include, but are not limited to, expanding the geographical extent of the test, extending testing hours including testing after sunset if not approved in the original permit, testing in inclement weather conditions if not approved in the original permit, increasing the number of test vehicles on the highways, changing the make, model and classification of test vehicles, or allowing passengers that are not an employee, contractor, or designee of the Applicant if not allowed in the original permit. Requests for waivers from items on the certification check list, standard permit conditions or special permit conditions may also be considered a material change. Thresholds for material modifications will be specified in permit conditions considering the characteristics of the testing plan.

Material changes to an AV Testing Permit must be approved by the Traffic Committee at a duly warned public hearing.

For non-material changes, written notice must be provided to the AOT Permit Coordinator. Examples of non-material modifications include replacing a test vehicle with an identical make, model and class vehicle and adding a new Test Vehicle Operator that meets the Act's age, experience, training, and background check requirements.

Preapproval of a non-material change is not required, but VTrans reserves the right to request additional information to determine whether the Agency has any safety concerns, will reject the non-material change, or will determine the change to be material.

3.4 Temporarily Restricting Testing

An automated vehicle testing permit may be temporarily voided and invalidated while travelling on a state or town highway by a law enforcement officer who determines there is a violation of any condition specified in the terms of the automated vehicle test permit or that the continuation of the trip would be unsafe.

3.5 Suspension or Revocation of Authorization

An automated vehicle testing permit may be suspended for a specific period of time or permanently revoked by the Traffic Committee if, after the opportunity for a hearing, the Traffic Committee determines that there is a violation of any condition or conditions specified in the terms of the automated vehicle test permit that warrants the suspension or revocation of the testing permit or that the continuation of the testing would be unsafe.

3.6 Periodic Test Results Reporting

The automated vehicle Applicant shall submit a report to the AOT Permit Coordinator on an annual basis at a minimum, or more frequently if required as a condition of the permit, until all testing ceases. In general, the Test Results Report will summarize results and observations related to safety, traffic operations, interaction with roadway infrastructure, comments from the public, and any other relevant matters.

The purpose of the report is to document how automated vehicles will operate on state and local roads in the Vermont context and to identify successful use cases to maximize opportunities for continued safe deployment of automated vehicles in the State. The report, and the test in general, will help build the confidence in ADS technology of the public and local and state public agencies that regulate, operate and build public roads.

The Applicant shall describe the type of information they will provide in the periodic test reports based on the goals of the proposed test and the testing plan. The following lists provide examples of the information that may be included.

General Reporting Information

1) A description of the testing activities, including for example:
    a) Operational design domain(s) tested in (locations, time of day, weather conditions, road typologies and speeds, and situational constraints)

   b) Amount of testing conducted in terms of hours and vehicle miles travelled
2) A description of takeover procedures used during testing, including the conditions for planned or unexpected disengagements of the ADS
3) General observations and lessons learned, for example related to roadways, construction work zones, signage, traffic signals, connectivity, or other infrastructure
4) Interactions with pedestrians, bicyclists, and motorcycles.
5) Feedback for municipal and state transportation engineers, planners, and policymakers
6) Goals for current and future testing, and/or proposals for changes to the Testing Plan and/or Operational Design Domain
7) A description of all unanticipated disengagements of the ADS meaning specific or events similar in nature to the following:
   a) Any testing/service disruptions
   b) Any unplanned disengagements
   c) Unprogrammed stops or emergency braking
8) Citations or violations received during testing, including:
   a) Date
   b) Time
   c) Location
   d) Type of roadway
   e) Weather conditions
   f) Vehicle speed
   g) Other parties involved
   h) A general description of the incident and relevant findings in support of continued safe operation of the test, to inform any related modifications to the AV Testing Permit if appropriate, and to inform the overall performance of the technology and lessons learned.

The following information may be required for tests that involve ride-for-hire or transit pilot services:

1) Total number of pilot service trips
2) Average number of passengers per trip, if applicable and known
3) Percentage of trips which were shared
4) Aggregated qualitative feedback on the user experience, if applicable
5) Aggregated qualitative feedback on curbside operations (entering and exiting a vehicle in a 'ride-for-hire' service), if applicable
6) Aggregated and anonymized origin and destination coordinates of each trip (census block face level specificity) with distance and time information (miles and minutes); applicant will be responsible for using best practices to mitigate any risks around user re-identification
7) Travel time between stops
8) City or town where each ride originated
9) City or town where each ride ended

10) Miles (or percent of miles) travelled while occupied and unoccupied by passengers during testing of ride-for-hire services, if applicable

3.7 Crash Protocol

In the event of a crash involving a test vehicle on public roads in Vermont:

- The Applicant will comply with the laws of the state of Vermont in regard to notifying law enforcement, if necessary, assisting at the crash scene if it can be done safely, and exchanging vehicle ownership and insurance information with other vehicle and property owners that may be involved.

- The Applicant will notify the AOT Permit Coordinator of any crash involving a test vehicle as soon as possible, or no later than 24 hours after a crash occurs. If the crash occurred on a class 1, 2, 3 or 4 town highway, the Applicant shall also notify the municipality's contact person and local law enforcement (if any) with jurisdiction over the involved town highway. The purpose of the notification, which can be through either phone call or email, is to provide preliminary information so the AOT, affected municipalities and law enforcement are prepared for any questions from the public or press. The notification should include to the extent possible in this time frame, the date, time and location of the crash as well as other preliminary facts known around whether there was property damage, personal injuries, or a fatality, if any.
- Within 72 hours of the crash, the Applicant must submit an Operator Crash Report to the Commissioner of Motor Vehicles for any crash that involves an injury, fatality or property damage of $3,000 or more. The Operator Crash Report is available here: https://dmv.vermont.gov/sites/dmv/files/documents/VA-004-Operator_Crash_Rpt_0.pdf
- Upon review of the Operator Crash Report, or crash reports prepared by law enforcement, the DMV Commissioner may require further facts concerning the crash. To assist with gathering the facts, the involved Test Vehicle Operator and Applicant may be required to participate in an in-person meeting with the Agency of Transportation, law enforcement and municipal officials from the town where the crash occurred.
- Consistent with Sections 3.4 and 3.5 above, the testing permit may be temporarily suspended by a law enforcement officer at the crash scene, or by the Traffic Committee if they determine that continuation of the test would be unsafe.
- The Traffic Committee may require modifications to the Applicant's Testing Permit Application to address safety issues that result from the evaluation of a crash. Permit modifications are described in Section 3.3.

The Applicant shall notify the AOT Permit Coordinator within 48 hours if a "major crash" (defined in Section 5) occurs outside of Vermont involving an Applicant's test vehicle. Depending on the circumstances of the crash, the Applicant may be asked by the AOT Permit Coordinator to temporarily pause the test to allow the State, affected municipalities and the Applicant to communicate and engage in appropriate fact finding and actions. The Applicant may be requested by the AOT Permit Coordinator to participate in an in-person meeting following submission of a Crash Report or similar documentation in the state where the crash occurred.

The Traffic Committee may require modifications to the Applicant's Test Permit to address safety issues associated with the crash.

3.8 VT Public Records Act Applicability and Exemptions

The Vermont Agency of Transportation is committed to transparency and public involvement while also protecting information essential to an Applicant's success that is deemed confidential or that qualifies as a trade secret by law. This section describes the State of Vermont's legal requirements related to pubic information and the process that will be followed both to (1) comply with state law governing public access to records and (2) protect information exempt from disclosure by law. This process is further defined for the Automated Vehicle Testing Permit Application and the Periodic Report described in Section 3.6, since both will be published and both may involve confidential information and/or information that qualifies as a trade secret.

The Permit Application and any and all information obtained by the Agency of Transportation in connection with the review and oversight of the Automated Vehicle Testing Permit are subject to the State of Vermont Access to Public Records Act (PRA), 1 V.S.A. § 315 *et seq*. Under the PRA, the Agency of Transportation must release to a requester public records or documents "produced or acquired in the course of public agency business," unless information requested is exempt from disclosure under the PRA. 1 V.S.A. § 317(b), (c). Thus, upon receipt of a PRA request, the Agency will independently evaluate any responsive public records and will not disclose information for which a lawful claim of exemption can be made pursuant to 1 V.S.A. § 317(c) including, but not limited to, trade secrets—e.g., "confidential business records or information, including any formulae, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which a commercial concern makes efforts that are reasonable under the circumstances to keep secret, and which gives its user or owner an opportunity to obtain business advantage over competitors who do not know it or use it." § 317(c)(9).

General PRA Process: This process applies to all requests under the PRA for information that may be in the Agency's possession. The Agency of Transportation shall immediately notify the Applicant of any request or demand for information of the Applicant, so that the Applicant may seek an appropriate protective order or otherwise defend any right it may have to maintain the confidentiality of its information under applicable State law. The Applicant shall have only three (3) business days from the date of the AOT's receipt of any such records request to seek a protective order or otherwise defend its information. Again, the Agency is obligated to review the responsive records independently. Should the Agency deem any information to be exempt from disclosure under the PRA, the Agency will not release such information to the public under the PRA. However, nonexempt information will be released unless the Applicant files for an appropriate protective order.

Confidential Information within the Automated Vehicle Permit Application: The Permit Application will be made available to the public, municipalities, and other interested parties prior to the Traffic Committee hearing on the application. The Applicant may include an optional Confidential Information Attachment to the Automated Vehicle Testing Permit that discloses confidential information that the Applicant determines is necessary to adequately address a requirement in the permit application. Any documents included with the Attachment should be

clearly marked as "Confidential Information" on each page by the Applicant. With the exception of the Confidential Information Attachment, the Automated Vehicle Testing Permit Application will not be considered Confidential Information by the Agency and will be made available to the public by publishing it on a website or by other means. In the event a public records request is made for the Confidential Information Attachment, the General PRA Process described above will apply.

Confidential Information within the Periodic Testing Reports: In order to meet the reporting requirement described in Section 3.6, the Applicant will provide a two-tier report to the Agency to include:

(1) information that the Applicant does not consider "Confidential Information" - this information will be made available to the public in accordance with the goals of testing and reporting by publishing it on a website or by other means; and

(2) information the Applicant provides that it considers to be "Confidential Information" – this information will not be published by AOT. However, any documents or portions or documents considered to be "Confidential Information" should be clearly marked as "Confidential Information" on each page by the Applicant. In the event a PRA request is made for the records that include "Confidential Information," the PRA Process described above will apply. Again, please note that any information contained in such records that is not exempt under the PRA will be released by the Agency, unless the Applicant files for an appropriate protective order.

Identification of Confidential Information in Permit Application. In order to foster transparency and proactive evaluation of concerns related to the protection of information the Applicant considers confidential or trade secrets, the Applicant will identify in the Permit Application the type of information it considers will be or may be confidential in order to meet the reporting requirements. Again, it is AOT's obligation to undertake its own evaluation of any such assertions. If the Agency deems information not to be exempt under the PRA, the Agency will release such information pursuant to the PRA request, unless it receives notice that the Applicant has filed for an appropriate protective order.

Confidential Information During Traffic Committee Hearings. The Open Meeting Law allows public bodies like the Traffic Committee to go into Executive Session if the Committee determines it necessary to discuss information presented in the application that is confidential and/or a trade secret under the PRA; this would include any such discussion during a "quasi-judicial proceeding" before the Committee related to modifications, suspension, and revocation of a permit. 1 V.S.A. § 310(6); § 313(a)(6). Participants in the Executive Session are limited to members of the Traffic Committee and, at the discretion of the Traffic Committee, "its staff, clerical assistants and legal counsel, and persons who are subjects of the discussion or whose information is needed." § 313(b).

4.0 PERMIT APPLICATION INSTRUCTIONS AND INFORMATION REQUIRED.

This section describes the organization and information required with the test permit application. The application should be no more than twenty-five (25) pages. The applicant may and is encouraged to include supplemental information to support the application, but any pertinent information or summaries of applicable information should be included in the 25 page application to allow AOT to make a decision on the application based on the information requested in accordance with this guidance.

Submission of an Automated Vehicle Permit application does not guarantee a right to test an automated vehicle on public roads in Vermont.

4.1 Permit Application Cover Letter

The permit application shall include a cover letter, a narrative that addresses the items listed in sections 4.2 through 4.14 below, the certification check list in Attachment 2 and other supplemental information as necessary. The cover letter shall be addressed to the AOT Permit Coordinator identified in Attachment 1. The letter will request the permit and provide an overview of the proposed test and define its purpose and goals. The cover letter must identify the Applicant and the designated contact person and contact information. The cover letter should be a maximum of two (2) pages.

4.2 Applicant Information

1) Applicant Name
2) Firm name and overview including experience with AVs, resources, documentation that they are a legitimate business with ability to safely conduct a test.
3) Documentation that the applicant is registered with the Vermont Secretary of State's office to do business in the state of Vermont and is in good standing with Secretary of State.
4) Mailing Address
5) Principal Point-of-Contact for Testing
    a) Name
    b) Title
    c) Telephone Number
    d) Email address

4.3 Testing Partners

Identify and describe the roles of partners, if any, that are involved in the test.

4.4 Vehicle Information

For each vehicle included in the test, provide:

1) Vehicle type and description of proposed use (such as but not limited to personal, shared/taxi, bus/shuttle, commercial/delivery, commercial/freight)
    a) "personal" will mean testing and use for a specific individual(s) only
    b) "shared/taxi" will mean testing and use for passenger pick-up and drop-off
    c) "bus/shuttle" will mean testing and use of a multi-passenger vehicle holding nine (9) or more people for passenger pick-up and drop-off
    d) "commercial/delivery" will mean testing and use of an ADS system for delivery of smaller goods, including food, health supplies, and retail items directly to households or persons
    e) "commercial/freight" will mean testing and use of an ADS system for the movement of commercial vehicles moving freight and not used for deliveries directly to households or persons
2) License Plate Number and State Issued
3) VIN Number, if applicable[1]
4) Year, Make & Model
5) Proof of Current Registration

4.5 Automated Driving System Information

Provide a general description of the hardware and software that will be tested, including the functions, and expected capabilities and limitations of the ADS. The Applicant, or a designated third party auditor, shall provide documentation or other evidence to demonstrate that the automated vehicles to be tested have been tested under controlled conditions (e.g., in simulation, closed track or on-road) for the Operational Design Domain (ODD) in which the Applicant intends the automated vehicle to operate and the Applicant has reasonably determined that the automated vehicle is capable of operation within the parameters of the ODD(s). The description should include the level(s) of automation anticipated to be achieved during the testing.

4.6 Test Vehicle Operator Information

For each person that will serve as a Test Vehicle Operator, provide:

1) Legal Name (First, Middle, Last)
2) Driver License Number
3) State or Country Issued
4) Training Completion Date and signed acknowledgement (see Attachment 2) that all Test Vehicle Operators successfully completed the automated vehicle Applicant's Test Vehicle Operator training program.

[1] Vehicle taken directly from an Original Equipment Manufacturer's assembly line, used for testing, and then immediately disposed of may not have a VIN Number.

4.7 Testing Plan

Identify the start and end dates and describe the ODD for the test. Examples of the information to be provided include but are not limited to:

1) The geographic boundaries of the test. Include a map to show the general area of testing. List the state highways to be included. Identify the municipalities where testing will occur. If testing is proposed on any class 2, 3 or 4 town highways, document and acknowledge any limitations or conditions established in a municipality's AV testing pre-approval resolution.
2) Describe the general roadway characteristics where testing will occur including functional class, town highway class, posted speed limit, rural/suburban/urban context, surface type and whether pedestrians and bicyclists are expected
3) Describe the test use case.
    a) Provide a description of the tests to be performed and the overall operations plan for the testing. This information should include but not be limited to number of vehicles, operating speeds if below posted limits (e.g. 15mph in 25mph zone), and any noteworthy target environments or tests to be performed if applicable.
    b) Will the test involve only affiliates of the Applicant? Will the public be passengers through a ride-for-hire, public transit, or other similar pilot service? If the public is involved, describe how senior citizens and people with mobility impairments, vision impairments, or other sensory impairments would be accommodated; and how the Applicant will serve the public while maintaining overall safety for the test (Note: Applicant can note that this information is included in the Safety Plan with a reference to applicable section).
    c) If the Applicant intends to proactively recruit senior citizens and people with mobility impairments, vision impairments, or other sensory impairments to participate in a pilot, the Applicant shall describe the recruitment approach. This requirement also applies to recruitment of any members of the public to be a part of any testing.
4) Describe how the public will be made aware and educated about the test.
5) Identify the days of the week and hours of operation and if testing will occur after sunset.
6) Identify the weather conditions under which testing will occur.
7) Identify any modifications to state and town highways or other infrastructure that may be required to support the test.

4.8 Safety and Risk Management Plan

The application for testing must include a Safety and Risk Management Plan as described below. The Applicant shall also provide a copy of the Voluntary Safety Self-Assessment as established in Section 1 of *Automated Driving Systems 2.0, A Vision for Safety* (NHTSA, September 2017), if one has been completed. If any of the information requested below is available in the VSSA, then an appropriate reference may be made to the VSSA.

A Safety and Risk Mitigation Plan ("Safety Plan") shall include, at a minimum:

1) Describe the qualifications of the person or persons providing the information required as part of the requested Safety and Risk Management Plan.
2) Describe in general terms how the test vehicles will be able to safely operate under the road conditions, including existing traffic laws, anticipated within the ODD.
3) A description of how the disengagement technology and process will put the vehicle in a minimal risk condition (defined in Section 5) in cases of unanticipated ADS system disengagement.
4) A description of pre-testing and ongoing validation methods to ensure reliably safe functionality of the software and hardware systems during operation.
5) Description of daily safety processes and procedures and how the applicant is ensuring compliance.
6) List and description of all operational emergency procedures and how the applicant is ensuring compliance, including how such practices and procedures will be updated based on findings and identified safety concerns from operation under the permit.
7) Documentation that the Applicant has conducted background checks and screening pursuant to 23 VSA §751 for all Test Vehicle Operators identified in the application and will upon request by the Vermont Agency of Transportation make the results available for inspection the Commissioner of Motor Vehicles or designee pursuant to 23 VSA §752.
8) A description of Test Vehicle Operator training program that includes a description of:
    a) How the Applicant informs Test Vehicle Operators of any relevant automated vehicle-related operational issues, including, but not limited to, any operational limitations of the ADS and the safe operating parameter(s) for the given ODD for the conditions under which the automated vehicle is tested on trafficways, including, but not limited to:
        i) Test Vehicle Operator knowledge of automated vehicle operations
        ii) Test Vehicle Operator's decision-making process when driver manually disengages ADS system
    b) Confirmation of Basic Driving Skills including, but not limited to,
        i) Basic Vehicle Operation
        ii) Visual Search
        iii) Night Operations, if applicable
        iv) Hazard Perception
        v) Responses to Vehicle Malfunctions
        vi) Responses to Sudden Emergencies
        vii) Responses to Driving Distractions
        viii) Responses to an Aggressive Driver
        ix) Responses to Adverse Weather Conditions
        x) Post-Crash Procedures

c) Basic knowledge of Vehicle Controls/Instruments/Safety Components

i) Basic Trip Procedures, including, but not limited to:

ii) Pre-trip Inspection Outside the Vehicle

iii) Pre-trip Preparation Inside the Vehicle

iv) Trip Planning

v) Post-trip Procedure

d) Divided visual and mental attention tasks particular to the operation of automated vehicles

e) Measures to prevent driver fatigue/inattentiveness/carelessness, including but not limited to:

i) Distracted Driving avoidance techniques

ii) Fatigue and Wellness Awareness

iii) Drug and Alcohol Impairment Awareness

9) A description of the safety measures and identified procedures in place in case of an ADS disengagement, regardless of the reason for the disengagement.

10) A description of how the ADS detects and avoids crashes with vulnerable users including pedestrians, bicyclists, and motorcycles.

4.9 First Responder Interaction Plan

Describe the strategies and tactics that will be used to address the following based on the proposed testing and ODD:

1) How a first responder can communicate with the operator of the vehicle and verify that the operator is a licensed driver who is available at all times that the vehicle is in operation, including providing a contact telephone number for the Applicant.

2) Where, in the vehicle, to obtain owner information, vehicle registration, and proof of insurance in the event of a collision or traffic violation involving the vehicle;

3) How to safely remove the vehicle from the roadway;

4) How to recognize whether the ADS is engaged, and if necessary, in the event of an emergency, how to safely disengage the ADS;

5) How to detect and ensure that the ADS has been deactivated.

6) How to safely interact with electric and hybrid vehicles, when applicable.

7) A description of the operational design domain of the test vehicle.

8) How law enforcement can verify the training of the operator(s).

9) Any additional information the Applicant deemed necessary regarding hazardous conditions or public safety risks associated with the operation of the automated vehicle.

The First Responder Interaction Plan shall be reviewed on a regular basis by the Applicant as changes are needed, but no less than an annual basis.

The First Responder Interaction Plan will be made available to any applicable law enforcement agency with jurisdiction within the ODD specified in the Permit Application. Prior to the start of the test, the Applicant shall provide training to first responders within the ODD on the methods and procedures within the Interaction Plan. The Agency of Transportation will assist with training organization and logistics.

For all vehicles in operation, written proof of an approved permit for testing in Vermont must be readily accessible upon request.

4.10 Operational Demonstration

The purpose of the Operational Demonstration will be to reasonably confirm the information included in the Safety Plan before starting testing.

4.11 Modifications to State and Town Highways

If a proposed test requires modifications to a roadway, the Applicant must seek approval from the Vermont AOT for state highways and municipalities for class 1, 2, 3 and 4 town highways pursuant to 19 VSA Section 1111. If modifications are proposed to state highways, the permit application must include a "Section 1111 Permit" Letter of Intent from the VTrans Permitting Services Unit before the testing application can be approved by the Traffic Committee. The approval process for state highways is described on the VTrans website here: https://vtrans.vermont.gov/planning/permitting . A final Section 1111 Permit is required from the VTrans Permitting Services Unit before any modifications are implemented on a state highway. If modifications are proposed on class 1, 2, 3 or 4 town highways, the application must include similar documentation from the affected municipality before the Traffic Committee can approve the test permit application. The Applicant should contact the municipality directly for details on the local approval process.

4.12 Applicant Acknowledgements (Attachment 2)

The application must include the acknowledgement checklist in Attachment 2 by initialing each requirement and signing the form. An applicant may request a waiver from specific items on the checklist. Justification for the waiver request must be provided in the application. Any approval of a waiver request will be at the sole discretion of Traffic Committee.

4.13 Standard Permit Conditions (Attachment 3)

The standard permit conditions in Attachment 3 will be included in every testing permit. An applicant may request a waiver from any specific condition. Justification for the waiver request must be provided in the application. Any approval of a waiver request will be at the sole discretion of Traffic Committee.

Further, as noted in Section 8, should any exceptions be taken to the Standard Permit Conditions, such exceptions should be adequately noted and explained as part of the application.

4.14 Confidential Information Attachment

This attachment can be provided if the Applicant determines it is necessary to provide confidential information to address a requirement in the Permit Application. See Section 3.8 for guidance.

4.15 Insurance

Before commencing the test, the Applicant must provide certificates of insurance to show that the following minimum coverages are in effect. It is the responsibility of the Applicant to maintain current certificates of insurance on file with the State through the term of the Automated Vehicle Testing Permit. No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the Applicant for the Applicant's operations. These are solely minimums that have been established to protect the interests of the State. An independent contractor hired by the Applicant for the purpose of conducting any aspect of the test, must be covered by the Applicant's insurance.

1) *Workers Compensation*: With respect to all operations performed, the Applicant shall carry workers' compensation insurance in accordance with the laws of the State of Vermont. Vermont will accept an out-of-state employer's workers' compensation coverage while operating in Vermont provided that the insurance carrier is licensed to write insurance in Vermont and an amendatory endorsement is added to the policy adding Vermont for coverage purposes. Otherwise, the Applicant shall secure a Vermont workers' compensation policy, if necessary, to comply with Vermont law.
2) *General Liability and Property Damage*: With respect to all operations performed under this Permit, the Applicant shall carry general liability insurance having all major divisions of coverage including, but not limited to:

    Premises - Operations

    Products and Completed Operations

    Personal Injury Liability

    Contractual Liability

    The policy shall be on an occurrence form and limits shall not be less than:

        $1,000,000 Each Occurrence

        $2,000,000 General Aggregate

        $1,000,000 Products/Completed Operations Aggregate

        $1,000,000 Personal & Advertising Injury

        If the performance of this agreement involves construction then a "per project" aggregate endorsement shall be required. In addition completed operations coverage shall be required to be carried for three years post project completion.
3) *Automotive Liability:* The Applicant shall carry automotive liability insurance covering all motor vehicles, including hired and non-owned coverage, used in connection with the Agreement. Limits of coverage shall not be less than $5,000,000 combined single limit and shall include the MCS-90 endorsement.
4) *Umbrella or Excess Liability:* The Applicant shall carry umbrella or excess liability insurance covering over the underlying general and automotive liability policies. Coverage shall be on an occurrence form and limits shall not be less than $1,000,000 per occurrence/$5,000,000 general aggregate unless higher limits are required by the State of Vermont.

5) *Additional Insured.* The General Liability, Auto Liability, Property Damage, and Umbrella/Excess coverages required for performance of this Agreement shall include the State of Vermont and its agencies, departments, officers and employees, and officers and employees of municipalities that have pre-approved testing, as Additional Insureds. Additional insured coverage shall be primary and non-contributory with any other insurance and self-insurance and shall include a waiver of subrogation in favor of the State of Vermont.
6) *Notice of Cancellation or Change.* There shall be no cancellation, change, potential exhaustion of aggregate limits of insurance coverage(s) without thirty (30) days prior written notice to the State. There shall be no non-renewal of insurance coverage(s) without forty-five (45) days prior written notice to the State.

5.0 GLOSSARY OF TERMS

Applicant: The automated vehicle tester that has prepared and submitted a permit application to test automated vehicles on public roads in Vermont.

Automated Driving System (ADS): As defined in the Automated Vehicle Testing Act, an ADS is the hardware and software that are collectively capable of performing the entire dynamic driving task on a sustained basis within its operational design domain, if any, including achieving a minimal risk condition, without any intervention or supervision by a conventional human driver, where applicable. The Agency of Transportation interprets this definition to a level 3, 4, or 5 driving automation system as defined by the SAE Levels of Automation referenced herein.

Automated vehicle: A motor vehicle that is equipped with an automated driving system.

Automated vehicle tester or tester: An individual, company, public agency, or other organization that is testing automated vehicles on public highways in Vermont pursuant to 23 V.S.A. Chapter 41 including an automated vehicle manufacturer, municipal or State agency, institution of higher education, fleet service provider, or automotive equipment or technology provider.

Conventional Human Driver: An individual who manually engages in-vehicle braking, accelerating, steering, and transmission gear selection input devices in order to operate a vehicle.

Dynamic Driving Task (DDT): All the real-time operational and tactical functions required to operate a vehicle in on-road traffic within its specific operational design domain, if any, excluding the strategic functions such as trip scheduling and selection of destinations and waypoints.

Major Crash: A crash that results in fatal or incapacitating injury.

Manufacturer: An individual or company that designs, produces, or constructs vehicles or equipment. Manufacturers include original equipment manufacturers (OEMs), multiple and final stage manufacturers, individuals or companies making changes to a completed vehicle before first retail sale or deployment (upfitters), and modifiers (individuals or companies making changes to existing vehicles after first retail sale or deployment).

Minimal Risk Condition: A condition in which an automated vehicle operating with the ADS engaged upon experiencing an unanticipated disengagement of its automated driving system that renders the automated vehicle unable to perform the dynamic driving task, achieves a reasonably safe state that may include bringing the automated vehicle to a complete stop.

Operational Design Domain (ODD): A description of the specific domain or domains in which an automated driving system is designed to properly operate, including types of roadways, ranges of speed, weather, time of day, and environmental conditions.

Test Vehicle Operator (Operator): An individual employed by or under contract with an automated vehicle tester who has successfully completed the tester's training on safe driving and the capabilities and limitations of the automated vehicle and automated driving system, can take immediate manual or remote control of the automated vehicle being tested, is 21 years of age or older, and holds an operator's license for the class of vehicle being tested, and has passed a background check.

Passenger: A user in a test vehicle who has no role in the operation of that vehicle. (SAE J3016)

Pilot Service Test: Providing passenger transportation services or other commercial services while testing an ADS.

Public Highway: A State or municipal highway as defined in 19 V.S.A. § 1(12).

Testing. Engaging an ADS for the purpose of assessing, demonstrating, evaluating, and/or validating the ADS on public highways.

Town Highway. A town highway is owned and maintained by an incorporated town, village or city. There are four classes of town highways. Class 1 town highways are almost always the extension of a VT or US numbered route. Municipalities and VTrans share jurisdiction over class 1 town highways. Municipalities have exclusive jurisdiction over class 2, 3 and 4 town highways. Class 2 town highways often connect two or more municipalities. Class 3 town highways typically begin and end within a single town, are slower speed residential streets or gravel "back roads" serving farms and other rural businesses as well as rural residential neighborhood. See 19 V.S.A. § 302 for the statutory definitions.

Traffic Committee: The Traffic consists of the Secretary of Transportation or designee, the Commissioner of Motor Vehicles or designee, and the Commissioner of Public Safety or designee and is responsible for establishing speed zones on state highways, parking and no parking areas on state highways, rules for use of limited access highways, and approval of the testing of automated vehicles, and other traffic control procedures.

Unanticipated Disengagement: A malfunction in a driving automation system and/or other vehicle system that prevents the driving automation system from reliably performing the portion of the DDT on a sustained basis, including the complete DDT, that it would otherwise perform. (SAE J3016)

6.0 ATTACHMENT 1: CONTACTS

Agency of Transportation Automated Vehicle Testing Permit Coordinator

Joe Segale, P.E., PTP | Policy, Planning & Research Bureau Director

Vermont Agency of Transportation

219 N. Main St. | Barre, VT 05641

802-477-2365 | joe.segale@vermont.gov

vtrans.vermont.gov

7.0 ATTACHMENT 2: CERTIFICATION CHECK LIST

Applicants Initials*	***Acknowledgement***
	1) That the person initialing and signing this check list has the proper qualifications and is the duly authorized representative of the Applicant with authority to act and bind the company submitting the AV Testing Permit Application. Please provide supporting documentation to demonstrate the person's qualifications and authority to sign on behalf of the Applicant. Such documentation may include a corporate resolution or other form of delegation
	2) That the operational design domain for the proposed test complies with the town highways that have been pre-approved, with any related conditions, as defined by a municipality's "Resolution to Approve the Testing of Automated Vehicles on Class 2, 3 or 4 Town Highways", or similar document approved by the legislative body of a municipality.
	3) That all automated vehicles that will be operated during the testing have been tested under controlled conditions that simulate as closely as practicable each proposed operational design domain in which Applicant intends to operate and Applicant has reasonably determined that it is safe to operate vehicles in each operational design domain, including compliance with all applicable state and municipal traffic and motor vehicle laws.
	4) That all automated vehicles included that will be operated as part of the testing can safely alert the Test Vehicle Operator, when applicable, that the Test Vehicle Operator must take control back from the automated vehicle, and that Test Vehicle Operator is capable of taking over immediately through physical control.
	5) That all automated vehicles that will be operated during the test have a mechanism to engage and disengage the ADS that is easily accessible to the Test Vehicle Operator, law enforcement and other emergency responder personnel.
	6) That the automated vehicle has an audio signal or visual display inside the cabin to indicate when the ADS is engaged.
	7) That all test vehicles are equipped with an automated driving systems data recorder that captures and stores sensor data for all vehicle functions that are controlled by the ADS for at least ten (10) seconds before a crash while testing. The data shall be made available to the Vermont Agency of Transportation and applicable law enforcement agencies within (10) days of written request.
	8) That the Applicant has considered and implemented reasonable measures, which may include industry standards, best practices, company policies, or other methods, to mitigate cybersecurity risk.
	9) That all Test Vehicle Operators successfully completed the automated vehicle Applicant's Test Vehicle Operator training program.
	10) That the automated vehicle Applicant has established and enforces a zero-tolerance policy for drug and alcohol use by operators while engaged in automated vehicle testing. The policy shall include provisions for investigations of alleged policy violations and the suspension of drivers under investigation.

	11) That the Applicant has conducted background checks and screening pursuant to 23 VSA §751 for all Test Vehicle Operators identified in the application and will upon request by the Vermont Agency of Transportation make the results available for inspection by the Commissioner of Motor Vehicles or designee pursuant to 23 VSA §752.
	12) That quality controls are deployed and monitored to ensure the acknowledgements checked above are implemented, adhered to and measured to ensure safe operation.
	13) That test vehicle(s) comply with federal regulations and meet Federal Motor Vehicle Safety Standards (FMVSS), or a written exemption from the National Highway Traffic Administration has been received.
	14) That this Permit Application and any and all information obtained by the Agency of Transportation in connection with the review and oversight of the Automated Vehicle Testing Permit are subject to the State of Vermont Access to Public Records Act, 1 V.S.A. § 315 et seq.

Signature of Applicant's Authorized Representative

Print Name

Print Title

Print Business Name

Signature of Authorized Representative **Date**

8.0 ATTACHMENT 3: STANDARD PERMIT CONDITIONS

The following terms and conditions will be a part of an approved permit. Should an Applicant take exception to any of the following terms and conditions, such exceptions shall be noted and explained as part of the permit application.

1) Defense and Indemnity:
   a) The Applicant shall defend the State, Municipalities and their officers and employees against all third party claims or suits arising in whole or in part from any act or omission of the Applicant or of any agent of the Applicant in connection with the performance of this Agreement. The State shall notify the Applicant in the event of any such claim or suit, and the Applicant shall immediately retain counsel and otherwise provide a complete defense against the entire claim or suit. The State and Municipalities retain the right to participate at their own expense in the defense of any claim. The State and Municipalities shall have the right to approve all proposed settlements of such claims or suits.
   b) After a final judgment or settlement, the Applicant may request recoupment of specific defense costs and may file suit in Washington Superior Court requesting recoupment. The Applicant shall be entitled to recoup costs only upon a showing that such costs were entirely unrelated to the defense of any claim arising from an act or omission of the Applicant in connection with the performance of this Permit.
   c) The Applicant shall indemnify the State, Municipalities and their officers and employees if the State, Municipalities and their officers or employees become legally obligated to pay any damages or losses arising from any act or omission of the Applicant or an agent of the Applicant in connection with the performance of this Permit.
   d) Notwithstanding any contrary language anywhere, in no event shall the terms of this Permit or any document furnished by the Applicant in connection with its performance under this Permit obligate the State or Municipalities to (1) defend or indemnify the Applicant or any third party, or (2) otherwise be liable for the expenses or reimbursement, including attorneys' fees, collection costs or other costs of the Applicant or any third party.
2) All vehicles used for such tests shall display a current inspection sticker and current registration plates and have been registered pursuant to 23 VSA Chapter 7.
3) During testing a Test Vehicle Operator will be present in the driver's seat of the automated vehicle and is either in immediate physical control of the automated vehicle or is actively monitoring automated vehicle operations and can take over immediate physical control during operation.
4) The following vehicles will not be approved for testing on public roads: Motorcycles and trailers, and vehicles manufactured by a person or entity not recognized by NHTSA as a manufacturer of motor vehicles.

5) Test vehicles shall include signs on the sides and/or rear of the vehicle to indicate it is an automated driving vehicle, or similar distinguishing features to enable first responders to identify it as an ADS-equipped vehicle.
6) The Applicant shall make all reasonable efforts to participate in training workshops and public events as requested by the Vermont Agency of Transportation.
7) Each Test Vehicle Operator shall be at least 21 years of age, possess a valid driver's license issued by a state or territory of the United States or country recognized by the State of Vermont pursuant to Title 23.
8) Test drivers shall not use a mobile telephone, hands-free mobile telephone or mobile electronic device, or otherwise engage in a distracting activity while testing on any public way.
9) A test driver shall not conduct Testing activities for more than 8 hours in any consecutive 24-hour period. (Check with Jake. What is the example standards??
10) As approved per the approved Testing Plan, a member of the public may ride in a test vehicle during a pilot service test provided such passenger tests adhere to the Transportation Network Company requirements in 23 VSA Chapter 10. The Applicant shall consider and plan for the accommodation of senior citizens and people with mobility impairments, vision impairments, or other sensory impairments.
11) The Applicant shall disclose to any passenger in the vehicle that is not a Test Vehicle Operator, employee, contractor, or designee of the Applicant the nature of personal information, if any, that may be collected about the passenger and how it may be used.
12) A copy of the Approved Automated Vehicle Test Permit and the First Responders Interaction Plan shall always be carried in the approved test vehicle(s), in the glove box or another conspicuous location.

9.0 ATTACHMENT 4: MUNICIPALITIES WITH PREAPPROVED AV TESTING

The best efforts are taken to ensure the accuracy of this list. The list should be verified by an Applicant with a request by email to the AOT Permit Coordinator.

None as of September 1, 2020

10.0 EXAMPLE MUNICIPAL TESTING APPROVAL RESOLUTION

Whereas, the Automated Vehicle Testing Act (The Act) per 23 VSA Chapter 41 requires a permit from the Vermont Traffic Committee to test automated vehicles, as defined in the Act, on public roads in Vermont; and

Whereas, the Act authorizes the Traffic Committee to issue automated vehicle permits for the entire state highway system and class 1 town highways which are the continuation of US and state numbered routes through municipalities, and

Whereas, the Act authorizes the Traffic Committee to issue automated vehicle test permits for testing on class 2, 3 and 4 town highways only if the legislative body with jurisdiction over those roads has pre-approved testing; and

Whereas, the Act requires that a municipality be notified 60 days prior to a Traffic Committee hearing on a testing permit application that involves testing on class 1, 2, 3 and 4 town highways in that municipality; and

Whereas, the Act allows the municipality to revoke or modify the conditions of its approval at any time by so indicating in a letter from the legislative body to the Secretary of Transportation; and

Whereas, a municipality is not required to modify town highways and other infrastructure under its jurisdiction to accommodate an automated vehicle test, and

Whereas, a municipality is not responsible for any costs associated with conducting the test;

Now Therefore, Be It Resolved the Town/City/Village of _____ approves the testing of automated vehicles on all class 2, 3 and 4 town highways under its jurisdiction with the following exceptions and conditions:

Testing Conditions (if any) That Apply to all Class 2, 3 and 4 Town Highways Approved for Testing

Town Highways Where Automated Vehicle Testing is Not Allowed

Town Highway Number	Road Name	Starting Point Reference	Ending Point Reference

Town Highways Where Automated Vehicle Testing is Approved with Conditions

Town Highway Number	Road Name	Starting Point Reference	Ending Point Reference	Condition

Passed and Adopted by the Town/City/Village of _____, State of Vermont on _____, 20__

Designated Contact Person (Name, position, mailing address, telephone # and email)

Select Board/Council/Trustees

_____ _____

_____ _____

_____ _____