



Autonomous Vehicle Testing Permit

**Nevada Department of Motor Vehicles
ATTN: Director's Office
555 Wright Way
Carson City, Nevada 89711**

**For questions regarding the autonomous vehicle regulations,
autonomous testing application process and/or consumer deployment
please contact:**

April Sanborn, Manager - Management Services & Programs Division
(775) 684-4719 or asanborn@dmv.nv.gov

Thomas Martin, Management Analyst - Management Services & Programs Division
(775) 684-4371 or tmartin01@dmv.nv.gov

Introduction

The State of Nevada is excited to lead autonomous vehicle development by licensing qualified companies to test their autonomous vehicle technology on our public roads. However, it is crucial that autonomous vehicles permitted to test in the state do not create an elevated risk to the Nevada public. Because the safety of the public is always the Department of Motor Vehicles' (Department) primary concern, we require that all testing applicants articulate how they have combined competent autonomous technology and safe testing practices.

Application Submittal

Application Approval

Upon approval of the application, a test permit detailing the testing parameters and limitations will be provided by the Department. This test permit is \$101 (\$100 for testing permit; \$1.00 Technology Fee). The permit must be carried at all times in each vehicle that has been approved for testing in Nevada and presented to a peace officer upon demand.

Each vehicle must display the autonomous vehicle testing plates. A set of plates are \$21.00 per vehicle (\$12.00 Business Plate Fee; \$3.50 per plate Production Fee; \$0.50 cents per plate Prison Industry Fee; \$1.00 Technology Fee). Each test vehicle to be tested in Nevada must be listed on the application and proof of vehicle ownership and insurance must be attached. To add or remove test vehicles associated to the autonomous vehicle test permit, notify the Department by filling out the OBL326 (Application for Autonomous Vehicle Testing Permit). A new permit will be provided by the Department.

Testing Permit Renewal

Your autonomous vehicle testing permit and testing plates will expire one (1) year from the date the testing permit was approved. To renew, complete the OBL326 (Application for Autonomous Vehicle Testing Permit) and submit to the Department thirty (30) days prior to the expiration date. Some changes may require additional documents or a drive demonstration please contact the Department for assistance. The renewal fee is \$101 for the autonomous vehicle testing permit and \$13 per set of testing permit plates for each vehicle that is listed.

Letter of Authorization

The Letter of Authorization is required to be completed and filled out as part of the application process. This letter will specify the persons who are authorized to conduct business with the Department, on behalf of the autonomous vehicle test company. The department will not release documents to any individual not listed on this form as an "authorized agent."

Insurance Requirements

As required by NRS 482A.060, prior to any person testing autonomous technology in this state you must submit proof of insurance or self-insurance, make a cash deposit or post and maintain a surety bond in the amount of \$5 million. If the insurance expires or becomes invalid for any reason, the testing permit will become invalid until updated proof of insurance is submitted. Be sure to submit the proof of insurance during the renewal of the testing permit to avoid delays.

Nevada Testing Geographical and Environmental Types

The Department has classified all of Nevada's public roads into four geographic types. This section describes what the Department has determined to make these locations uniquely challenging for autonomous vehicles.

Geographic Types:

Interstate Highways

Interstate highways are highways that are part of the federal interstate highway system and exhibit the following characteristics:

1. speeds of up to 80 MPH
2. ongoing road construction
3. infrequent pedestrian traffic and foreign debris
4. controlled access
5. high speed maneuvers and braking requirements
6. toll booths

State Highways

State highways are any US or SR highway (*State Highways inside an urban corridor must have additional authority*) and exhibit the following characteristics:

1. Speeds of up to 80 mph
2. Ongoing road construction
3. Possibility of pedestrian, bicycle, and livestock obstacles
4. Traffic control devices (such as stop lights and stop signs)
5. Downtown/mid-city congestion
6. Various non-controlled access points

Urban Environments

Nevada's Urban Environments exhibit the following characteristics:

1. High levels of pedestrian traffic
2. Traffic control devices (such as stop lights, stop signs, and school zones)
3. Frequent road construction or roadblocks and foreign debris
4. Variable speed controls
5. Metered and parallel parking
6. Speed bumps or physical speed control devices
7. Animals off leash
8. Children at play in the roadway
9. Commercial shopping centers
10. Intersections lacking traffic control devices

Unpaved or Unmarked Roads

Any road outside of a city that is not a State Highway or Interstate are considered Rural or Unpaved roads. Additionally, any roads found inside an urban environment which are unpaved or unmarked are considered part of this environment. Unpaved or Unmarked roads exhibit the following characteristics:

1. Degraded pavement quality or no pavement (dirt roads)
2. Inconsistent or nonexistent road markings
3. Moderate levels of pedestrian traffic and foreign debris
4. Children at play in roadways
5. Animals off leash
6. Unmarked intersections

Environmental Types:

The environmental types you may apply for are:

- Night driving
- Rain
- Fog
- Snow/ice
- High crosswinds (gusts above 30mph)

Due to the unpredictability of weather conditions, environmental types may, at a later date, be added to the testing permit if the applicant certifies the technology can successfully and safely perform in these conditions.

Safety Practices

Any autonomous test vehicle operating in autonomous mode **with** a human operator present in the vehicle must ensure the following:

- The driver is seated in a position which allows the operator to take immediate manual control of the vehicle.
- The driver is capable of taking over immediate manual control of the vehicle in the event of a failure of the automated driving system.

Any autonomous test vehicle operating in autonomous mode **without** a human operator present in the vehicle must be able to achieve a minimal risk condition.

“Minimal risk condition” as defined in NRS 482A, is a condition in which an autonomous vehicle operating without a human driver, upon experiencing a failure of its automated driving system that renders the autonomous vehicle unable to perform the dynamic driving task, achieves a reasonably safe state which may include, without limitation, bringing the autonomous vehicle to a complete stop.

If the technology is not able to achieve the minimal risk condition then a human operator must be present in the vehicle and ready to take control in the event of a failure of the automated driving system.

Combining Procedure & Technology

Applicants must have in place the processes and procedures to mitigate the risk of any potentially underdeveloped technologies.

Additional documentation required for Department records:

- A description of your autonomous technology and its capabilities

This does not need to be a fully technical description. This description should be written with a non-technical audience in mind.

- The safety plan for testing on public roadways

In the safety plan, provide details on how your vehicle will handle any situations that could be considered hazardous. Also included in the safety plan needs to be the steps that will be taken to achieve the previously described minimal risk condition, if the technology were to encounter a failure.

- Your plan for hiring and training the test vehicle operators

Accident Reporting

Pursuant to NRS 482A, within 10 days of any accident resulting in personal injury or property damage that exceeds \$750 or traffic violation occurring while operating an autonomous test vehicle, the licensee must provide the Department with a report of the incident. The report must include a copy of any accident report or any citation.

Disabled Operators

Overview: In July 2016, the Department of Motor Vehicles was successful in expanding their existing regulatory requirements for autonomous testing. The new testing requirements are **not intended** for companies with test drivers possessing a valid driver's license in the State they reside in. The new requirements are for test operators who would be required to apply for a "restricted" driver's license with the Department and do not currently hold a valid driver's license in any state due to a disability.

If the operator of the autonomous vehicle has been disqualified from driving due to a disability, then a restricted driver's license is required for the disabled operator to be able to operate the autonomous vehicle. The following restrictions will apply:

- A detail form is carried by the restricted license holder authorizing that holder to only operate the autonomous **test** vehicle with the technology engaged.
- The restricted license holder is **employed** by the company applying for this autonomous vehicle testing permit.
- A pilot vehicle, **supplied by the autonomous test company**, will be operated directly in front of the autonomous vehicle
- The restricted license holder must be accompanied by a second person that:
 - Is seated in a position which allows the person to safely engage and disengage the autonomous technology and take active or physical control of the vehicle.

If, for any unforeseen reason, the above mentioned pilot vehicle is unable to continue to operate as such:

- The operator of the autonomous vehicle must pull the autonomous vehicle safely to the side of the road, **or**
- The second person in the autonomous vehicle must disengage the autonomous technology and take active or physical control of the vehicle.

If a restricted license, as mentioned above, is issued then the test permit applicant must provide proof to the Department that:

- The holder is an employee of the test permit holder.
- The holder has completed no less than 50 hours of training in an autonomous vehicle.
 - May include no more than 10 hours of operation of an autonomous vehicle simulator.
 - Must include no less than 40 hours of operation of an autonomous vehicle on any paved, graded, or similar surface, including a race track or private course
- Any other information the Department may request.



APPLICATION FOR AUTONOMOUS VEHICLE TESTING PERMIT

Application Type:

Permit Number _____
 (If new applicant, please leave blank)

- New
 Renewal
 Change (Type of change):
 Address Vehicles Company Information
 Geographic Types Environmental Types

Business Name: _____

Mailing Address: _____
Street City State Zip

Physical Address: _____
Street City State Zip

Business Telephone Number: _____ Business Fax Number: _____

Email address: _____ FEIN: _____

Sole Proprietorship Partnership LLP LLC Corporation Incorporated in State of _____

List name and title of each individual, each partner, whether general or limited, or each principal officer, director or stockholder participating in the direction, control or management of the policy of the project. Use separate page to list additional individuals, if necessary. Changes require notification to the Department.

Name (Last, First, Middle)	Title	Contact Telephone Number

Registered Agent Information:

Name	Address	Telephone Number

Licensed Operators:

Name	Driver's License Number	State Issued

Autonomous Test Vehicle Information:
(A \$21 fee for each set of new Testing Permit Plates is required)

Year	Make	Vehicle Identification Number (VIN)																	

As a Nevada Autonomous Vehicle Testing Company, I affirm to the best of my knowledge and belief, each vehicle to be tested in Nevada: 1) is safe to operate on the highways of this State; 2) if an operator is in the vehicle, has a system to safely alert the operator to take control of the autonomous vehicle if a technology failure is detected or if no operator is in the vehicle, the autonomous vehicle can achieve a minimal risk condition as required in NRS 482A; 3) is equipped with autonomous technology which does not adversely affect any other safety features of the vehicle which are subject to federal regulation. Additionally, I agree to operate my testing vehicle in accordance with the requirements set forth in Chapter 482A of the Nevada Revised Statutes and Nevada Administrative Codes.

I understand that providing of false information or the omission of the requested information in this application is grounds to deny, suspend, or revoke my testing permit and constitutes a gross misdemeanor under Chapter 482A of the Nevada Revised Statutes. **I declare under penalty of perjury that the information contained in this application and any and all additional materials supplied to the Department are true and correct.**

Applicant's Signature

Date

Applicant's Printed Name and Title

State of _____, County of _____

Subscribed and sworn before me this _____ day of _____, _____

Notary Public or Authorized Nevada DMV Representative Signature

(Notary seal)

<u>OFFICE USE ONLY BOX</u>		
<p>Approved Geographic Types</p> <p><input type="checkbox"/> Interstate Highways <input type="checkbox"/> State Highways <input type="checkbox"/> Urban Environments <input type="checkbox"/> Unpaved/Unmarked Roads</p> <p>Approved Environmental Types</p> <p><input type="checkbox"/> Night Driving <input type="checkbox"/> Rain <input type="checkbox"/> Fog <input type="checkbox"/> Snow/Ice <input type="checkbox"/> Wind</p>	<p style="text-align: center;">Testing License Plates</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p style="text-align: right;"><input type="checkbox"/> Approved <input type="checkbox"/> Denied</p> <p>Initials: _____</p> <p>Employee ID: _____</p> <p>Date: _____</p>

LETTER OF AUTHORIZATION

Business Name: _____ Permit Number: _____

Address: _____

City State Zip Code: _____

Telephone Number: (____) _____

Please check appropriate authorization boxes:

Pick Up Permits

Pick Up Plates/Decals

Printed Name of Authorized Agent

Signature

Printed Name of Authorized Agent

Signature

Printed Name of Authorized Agent

Signature

Printed Name of Authorized Agent

Signature

The listed Agent(s) is no longer authorized to represent my business:

Printed Name of Agent

Printed Name of Agent

Printed Name of Agent

Printed Name of Agent

Printed Name of Agent

Printed Name of Agent

I hereby authorize the changes as indicated above for my business with the Nevada Department of Motor Vehicles.

Printed Name of Principal

Signature of Principal

Date

To protect your business, notify the Department immediately of any changes to the above information.

AUTONOMOUS VEHICLE TEST PERMIT BOND

Bond Number _____

Permit Type:

- Testing Company
 Certification Facility

KNOW ALL MEN BY THESE PRESENTS:

That _____, as principal,
(Corporate Name and Doing Business As Name)

located in the County of _____, State of Nevada, obligee, and, _____
(Name of Surety)

a corporation organized and existing under and by virtue of the laws of the State of _____, and authorized to transact a surety business in the State of Nevada, as surety, are held and firmly bound unto the State of Nevada in the penal sum of \$5,000,000 for the payment of which well and truly to be made we hereby bind ourselves, our respective heirs, administrators, executors, successors and assigns jointly and severally, firmly by these presents:

To be effective on the _____ day of _____, _____

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the above-named principal has been licensed to carry on or conduct in this State the business of testing and/or certifying Autonomous Vehicles; and

WHEREAS, the above-named surety herein agrees that any person injured by the action or actions of the principal and/or his employees involved in any fraud or fraudulent representation or in violation of any of the provisions of Chapter 482A of the Nevada Revised Statutes or Nevada Administrative Codes may bring action in said injured person's own name against the said surety. This bond is continuous in form and the total aggregate liability of the bond is limited to the payment of the total amount of the bond. In the event of a dispute of a claim by the surety company, application may be made to the Director, Department of Motor Vehicles for good cause shown. After notice and hearing, the director may authorize payment of funds from here said surety coverage.

(SEE NEXT)

Bond Number _____

This bond may be canceled by the surety at any time by giving written notice by registered mail of its desire and intention so to do. Said cancellation shall be effective thirty (30) days after the receipt of said notice by the State of Nevada, Department of Motor Vehicles, Occupational and Business Licensing Section.

Signed, sealed and dated this _____ day of _____, _____

(Printed Name, Principal)

(Signature, Principal)

(Surety)

Telephone Number of Surety: (____) ____-____

(Mailing Address of Surety Company, Street)

(City, State and Zip Code)

By _____
(Signature, Attorney-In-Fact for Surety)

(Printed Name, Attorney-In-Fact)

(Surety Seal)

Countersigned on behalf of:

(Surety)

this _____ day of _____, _____

(Signature, Agent)

(Printed Name, Agent)

(Business Name, Agent)

(Business Address, Agent)

AUTONOMOUS TECHNOLOGY CAPABILITIES CERTIFICATION

This checklist is to identify the geographic types, environmental types and specific capabilities that the autonomous vehicle can perform.

Please check the box that indicates the geographic and/or environmental types that you intend to test your autonomous vehicle technology in.

Geographic Types:

- Interstate Highways
- State Highways
- Urban Environments
- Unpaved/Unmarked Roads

Environmental Types:

- Night Driving
- Snow/Ice
- High Crosswinds (gusts above 30 mph)
- Rain
- Fog

Please note that if you plan on testing the autonomous technology be sure to check the box for the geographic/environmental types in which you wish to test. The selections on this page will be displayed on the testing permit. If testing outside of the permitted regions is detected, the Department may revoke the testing permit.

AUTONOMOUS VEHICLE TESTING PERMIT APPLICATION REQUIREMENTS

- Application for Autonomous Vehicle Testing Permit (OBL326).
- A nonrefundable licensing fee of \$101.00, plus \$21 for each set of Testing Permit Plates required for each vehicle.
- A Letter of Authorization (OBL276).
- A Surety Bond (OBL328), Cash Deposit, or proof of insurance or self-insurance in the amount of \$5,000,000.
- Autonomous Technology Capabilities Certification
- Proof of ownership for each autonomous vehicle listed on the application (i.e. Title, Manufacturer's Certificate of Origin, Security Agreement, Vehicle Registration or other proof sufficient to the Department).
- An Insurance Certificate that meets or exceeds Nevada's minimum liability requirements pursuant to NRS 485.185 for each autonomous testing vehicle listed on the application. May not be an Operator's Policy as described in NRS 485.186.
- Submit a description of your autonomous technology.
- Submit documentation detailing your safety plan for testing on public roadways.
- Submit your plan for hiring and training the test vehicle operators.

* * * **Disclosure of Information** * * *

The Nevada Department of Motor Vehicles is a public agency. The Department is subject to "Freedom of Information Act" requests per Nevada Revised Statute 239.010. These requests can come from any person or organization and any books, communications and records are subject to inspection or review upon the request. By law, the Department cannot withhold any of the information that is requested. If you have any proprietary information that you do not want included as a part of these records requests, please be sure to omit that information from this application and any communications moving forward.