Autonomous Vehicle Testing License

(Revised: January, 2016)

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

For Questions, Contact:
Jude Hurin (775) 684-4562
Introduction
The State of Nevada is excited to lead autonomous vehicle development by licensing qualified companies to begin testing on 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 Vehicle’s primary concern, we require that all testing applicants articulate how they have combined competent autonomous technology and safe testing practices.

Testing Proof
In order to demonstrate that the autonomous technology to be tested on Nevada roads has reached a reasonable level of maturity, regulation requires that applicants provide proof of ten thousand miles of prior autonomous vehicle operation. The application should show summary statistics and a report of all of the prior autonomous testing the applicant would like the Department to consider when processing their application.

The presentation of statistics should be made with a non-technical audience in mind. The Department is not interested in exhaustive logs of all the miles claimed, however, applicants should have proof of all the miles claimed. The report should explain if you have encountered and how your vehicle handles the following while driving in autonomous mode; traffic control devices, pedestrians/objects of variable size, speed variations and various environmental types.

Examples of these include but are not limited to:
- **Traffic Control Devices**: roundabouts, stop lights, traffic signs, school zones, cross walks, construction zones
- **Pedestrians/Object of Variable Size**: humans, bicycles, animals, rocks
- **Speed Variations**: recognize speed limit signs, temporary speed restrictions, school zone variable speed limits
- **Environmental Types**: rain, snow/ice, fog, night driving

Applicants should have prior experience testing in the environments in which they are requesting a testing license for. Applications should provide enough information about the testing environment such that the Department could evaluate whether or not all of the miles claimed are sufficiently similar to the Nevada environment in which the applicant is applying to test.

Your report should also include descriptions of any past incidents in which a vehicle in autonomous mode was in an accident or issued a traffic citation.

Nevada Testing Geographical Categories and Environmental Types
At the discretion of the Department your testing license may be limited to specific geographic categories and environmental types. The Department has partitioned all of Nevada’s public roads into six geographic categories. This section describes what the Department has determined makes these locations uniquely challenging for autonomous vehicles. The aim of these descriptions is to allow applicants to determine which locations they have proven testing experience in, and which locations they would like to apply for on their testing license.

The Department recognizes that not all six categories have perfectly similar environments in which an applicant could have conducted prior testing. For example, as the fourth largest international tourist destination, it is hard to find any place that is quite similar to the Las Vegas strip. Thus, the characteristics of each category are listed not as specific requirements but as criteria for determining whether or not an applicant’s test environment presents challenges similar to the comparable Nevada environment. Should there be any questions about whether or not an applicant's test environment will be determined analogous to a Nevada environment; applicants should contact the Nevada Department of Motor Vehicles.
Geographic Categories:

**Interstate Highways**
Interstate highways are any highways that are part of the federal interstate highway system. Interstate Highways exhibit the following characteristics:

1. speeds of up to 75 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 or Complex Urban corridor must have additional authority* State Highways exhibit the following characteristics:

1. speeds of up to 75 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**
Urban Environments are defined as the downtown core of Carson City, Elko, Laughlin, Reno, South Lake Tahoe and Sparks. Urban Environments exhibit the following characteristics:

1. variable speed controls
2. high levels of pedestrian traffic
3. traffic control devices (such as stop lights and stop signs)
4. metered and parallel parking
5. possible road blocks and foreign debris
6. speed bumps or physical speed control devices
7. animals off leash
8. children at play in the roadway

**Complex Urban Environments**
Nevada’s only Complex Urban Environment exists within the I215 beltway in Las Vegas. Complex Urban Environments exhibit the following characteristics:

1. extremely 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
**Residential Roads**

Residential roads include any road in populated areas. Residential roads exhibit the following characteristics:

1. moderate levels of pedestrian traffic and foreign debris
2. traffic control devices (such as stop lights, stop signs, and school zones)
3. ongoing road construction
4. speeds of up to forty five MPH
5. speed bumps or physical speed control devices
6. animals off leash
7. children at play in the roadway
8. Commercial shopping centers

**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 of a residential area or Complex 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 non existent road markings
3. moderate levels of pedestrian traffic and foreign debris
4. children at play in roadways
5. animals off leash

**Environmental Types:**

The environmental types you may apply for are:

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

At any point, an applicant can apply to expand their testing license to more geographic categories or environmental types. This does not require a separate ten thousand miles of prior testing experience be submitted. Instead, the applicant should describe what new testing experiences or procedures demonstrate an increased ability to test in the new environment and be able to demonstrate the vehicles capabilities in that category or environment.

**Combining Procedure & Technology**

By regulation, every applicant must have prior testing experience - a minimum of ten thousand miles of autonomous vehicle driving. This requirement is crucial to demonstrating that an applicant has competent autonomous technology and that they have created a methodology to safely test that technology. The Department recognizes that the technology that applicants wish to test is still under development. In order to allow further development of imperfect technology without elevating the risk to the public, applicants must have in place processes and procedures to mitigate the risk of any potentially underdeveloped technologies.

Additional documentation we would like to see for our evaluation:

- A complete description of your autonomous technology
- Your safety plan for testing on public roadways
- Your plan for hiring and training the test vehicle operators
Safety Practices
Licenses must ensure that at least two persons are physically present in the autonomous vehicle while it is tested on a highway in this state. One person must be designated the operator and must at all times be seated in a position which allows the person to take complete control of the vehicle, including, without limitation, control of the steering, throttle and brakes. Each person must hold a valid driver’s license and be trained in the operation of the autonomous vehicle including the capabilities and limitations of the technology. These persons must actively monitor for any aberration in the functioning of the autonomous vehicle while it is engaged.

If your autonomous vehicle is involved in an accident during the course of testing or your operator is issued a citation for any traffic violation or other laws applicable to drivers of motor vehicles operated in this state during the course of testing you are required to submit a report to the Department within ten business days. The report must include a copy of any accident report or any citation.

Application and Technology Evaluation
Upon submitting your application, proof, and additional documentation to the Department of Motor Vehicles you will be contacted to schedule a meeting and vehicle demonstration in Nevada. During the meeting you will be expected to present a complete description of your autonomous technology including the methodology of your system along with your safety plans and driver training. During the demonstration we will be asking you to operate your vehicle in autonomous mode along a route created by you and approved by the Department. The route you create should encompass several characteristics in the geographic categories and environmental types you are applying to test in. While navigating this route in autonomous mode your technology will be evaluated to determine if it can handle the various situations you may encounter in the geographic categories and environmental types you are applying to test in. The Department may ask for additional explanation or documentation describing the methodology your company will use to handle conditions not encountered while on the demonstration. You must be able to prove your autonomous technology is capable of the conditions you reported in your ten thousand miles of previous testing experience.

Application Approval
Upon approval of your application, geographic categories and environmental types you will be given a certificate that details your approval and testing limits. This certificate must be carried in each vehicle approved for testing in Nevada and presented to a peace officer upon demand.

You must obtain a set of autonomous vehicle testing license plates for each vehicle you test in Nevada. A set of plates are $21.00 per vehicle ($12.00 Business Plate Fee; $3.50 per plate Production Fee; 50 cents per plate Prison Industry Fee; $1.00 Technology Fee). An application must be completed and proof of ownership and insurance shown. Anytime you wish to change or add vehicles tested in Nevada you must notify the Department on a separate application.

If you would like to change or add geographic categories or environmental types to your testing license you would need to submit an additional application. A meeting with Department staff and a vehicle demonstration in Nevada would be scheduled to evaluate the changes being requested.

Your autonomous vehicle testing license and test plates will expire one year from the date your testing license was approved. You must complete the application packet and submit it to the Department thirty days prior to expiration in order for your license to be renewed. You do not need to submit any additional documentation to renew; the application is all that is required.
APPLICATION FOR AUTONOMOUS VEHICLE TESTING

Reason for Submittal: ____________________________ License Number ____________________________

- [ ] New Application
- [ ] Renewal
- [ ] Change

(Indicate type of change)

Individual/Corporate Name: ____________________________

DBA Name: ____________________________

Mailing Address: 
Street ____________________________ City ____________________________ State ______ Zip ______

Physical Address: 
Street ____________________________ City ____________________________ State ______ Zip ______

Business Telephone Number: ____________________________ Business Fax Number: ____________________________

E-mail 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, if applicable. Use separate page to list additional individuals, if necessary. Changes require notification to the Department.

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<th>Name (LAST, FIRST, MIDDLE)</th>
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Registered Agent:

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Requested Geographic Categories & Environmental Types:

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<th>Night Driving</th>
<th>Rain</th>
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<th>Snow/Ice</th>
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Autonomous Test Vehicle Information (A $21 charge for each set of Testing License Plates is also required):

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<th>Year</th>
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As a Nevada Autonomous Vehicle Testing Company, I affirm to the best of my knowledge and belief, each vehicle to be tested in Nevada is: 1) safe to operate on the highways of this State; 2) has a separate mechanism, in addition to, and separate from any other mechanism required by law, to capture and store, the autonomous technology sensor data for at least 30 seconds before a collision occurs between the autonomous vehicle and another vehicle, object or natural person while the vehicle is operating in autonomous mode. The autonomous technology sensor data must be captured and stored in a read-only format by the mechanism so that the data is retained until extracted from the mechanism by an external device capable of downloading and storing the data. Such data must be preserved for 3 years after the date of collision; 3) has a switch to engage and disengage the autonomous vehicle that is easily accessible to the operator and is not likely to distract the operator from focusing on the road while engaging or disengaging the autonomous vehicle; 4) has a system to safely alert the operator to take control of the autonomous vehicle if a technology failure is detected; 5) 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 company 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 license and constitutes a gross misdemeanor under Chapter 482A of the Nevada Revised Statutes. **I declare under penalty of perjury that the information contained in my application, proof of 10,000 miles of prior autonomous vehicle operation, complete description of the autonomous technology, safety plan for testing on public roadways, plan for hiring and training of test vehicle operators, vehicle demonstration, and any and all additional materials supplied to the Department are true and correct.**

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Applicant Signature ___________________________ Date __________

Applicant Printed Name and Title (if applicable) ___________________________

State of Nevada, County of ________________

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

Notary Public or Authorized Nevada DMV Representative Signature __________________ (Notary seal)

**OFFICE USE ONLY BOX**

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Initials: ____________________

Employee ID: ________________

Date: ________________

OBL326 (01/2016)
LETTER OF AUTHORIZATION
Please print or type

Business Name: ____________________________________________    Business License Number: _______________

Address: _________________________________________________________________________________________

City State Zip Code: ________________________________________________________________________________

Telephone Number: (_____) ______________

Please check appropriate authorization boxes:

☐ All Activities    ☐ Pick Up Licenses    ☐ Pick Up Plates/Decals
☐ Pick Up Supplies    ☐ Pick Up Titles    ☐ Sign Forms
☐ Sign Renewal Form    ☐ Sign Titles

Printed Name of Authorized Agent    Signature

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.
CHILD SUPPORT INFORMATION

Nevada Administrative Code 482A requires the Department to request statements regarding child support from applicants for new and renewal of Autonomous Vehicle licenses.

Each license applicant applying for a new or renewal of his or her license must complete and sign the Child Support Information below.

Regulation prohibits the Department from processing your application without submission of the information below. Please mark the appropriate response and complete the remainder of the form. Failure to mark one of the three and completion of the form will result in denial of the application.

☐ I am not subject to a court order for the support of a child.

☐ I am subject to a court order for the support of one or more children and am in compliance with a plan approved by the district attorney or other public agency enforcing the order for the repayment of the amount owed pursuant to the order; or

☐ I am subject to a court order for the support of one or more children and am not in compliance with the order or plan approved by the district attorney or other public agency enforcing the order for the repayment of the amount owed pursuant to the order.

________________________________________
Applicant’s Social Security No.

________________________________________
Applicant’s Name *(please print)*

________________________________________
Signature of Applicant

________________________________________
Date
AUTONOMOUS VEHICLE BUSINESS LICENSE BOND

Bond Number ___________________________         License Type:

☐ Testing Company
☐ Certification Facility

KNOW ALL MEN BY THESE PRESENTS:

That ________________________________, as principal,

(Individual or Corporate Name and Name Doing Business as)

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 ____________________, ______

X________________________________________

(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 VEHICLE TESTING LICENSE REQUIREMENTS

- Autonomous Vehicle (AV) Business License Application (OBL326).
- A nonrefundable licensing fee of $100.00, plus $13 for each set of Testing License Plates required for each vehicle.
- A Child Support Information form (OBL268).
- A Surety Bond (OBL328), Cash Deposit, insurance, or proof of self-insurance in the amount of $5,000,000.
- Submit proof sufficient to the Department of Motor Vehicles that one or more of the applicant’s AV’s have been driven for a combined minimum of at least 10,000 miles in Autonomous mode, under varying types of roads, weather conditions and times of day and night.
- Proof of ownership for each AV 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 and may not be an Operator’s Policy as described in NRS 485.186 for each vehicle autonomous testing license plates are applied for.
- Submit a complete 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.