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**Driver Education Driving Simulator Application**

**NMAC 18.20.3.13 (A.2.b):** [As it applies to credited behind-the-wheel driving hours]

“*with prior written approval from the bureau, by using a driving simulator approved by the bureau, provided that two (2) hours of instruction using a driving simulator shall be equivalent to one (1) hour of on-street training*.”

**Directions:**

1. **Read the NHTSA standards** for a driving simulator **and** the list of Nationally Approved Driving Simulators **before purchasing a driving simulator.**
2. Choose an approved simulator or a simulator that meets the guidelines.
3. Complete the application and email to: [tscdriverprograms@unm.edu](mailto:tscdriverprograms@unm.edu)
4. A copy of this application either approved or denied will be emailed back to you.

**Please note:**

* A driver education school is not authorized to use a driving simulator without TSD approval.
* The driving hours of any student using an unauthorized driving simulator will not be credited towards any behind-the-wheel driving hours.
* TSD reserves the right to withdraw any approval of a driving simulator if it is discovered that it is being utilized inappropriately in accordance with the rules.

**NHTSA standards for a driving simulator:**

**A. Realism and Fidelity**

* Visual Display Quality: The simulator must have high-resolution graphics, realistic road environments, and accurate lighting conditions to replicate real-world driving as closely as possible.
* Vehicle Dynamics: The simulator must accurately model vehicle behavior, including steering response, acceleration, braking, and handling under various conditions (e.g., wet roads, ice).
* Audio Feedback: Realistic sound effects, such as engine noise, tire screeching, and environmental sounds.

**B. Scenario Flexibility**

* Customizable Scenarios: The ability to create and modify driving scenarios is crucial. Simulators need to allow for a wide range of situations, such as urban traffic, rural roads, highway driving, adverse weather, and emergency situations.
* Traffic Interaction: Simulators need to include realistic traffic behavior, including interactions with other vehicles, pedestrians, and cyclists.

**C. Data Collection and Analysis**

* Comprehensive Data Logging: The simulator should be capable of recording detailed data on driver performance metrics, such as reaction times, lane position, speed, and error rates.
* Real-Time Monitoring: For research and training purposes, real-time monitoring of driver inputs (e.g., steering, braking, and acceleration) is necessary.
* Export Capabilities: The data should be easily exportable for further analysis using statistical software.

**D. Safety and Usability**

* Ergonomics: The simulator must be comfortable for extended use, with adjustable seats, pedals, and steering controls to accommodate different user sizes.
* User Safety: Especially for motion-based simulators, there should be measures to prevent simulator sickness (nausea or dizziness) and ensure physical safety (emergency stop buttons).
* Accessibility: Compliance with the Americans with Disabilities Act (ADA) is required for educational settings, ensuring accessibility for all users.

**E. Reliability and Maintenance**

* Technical Support and Upgrades: The simulator must have with reliable technical support, regular software updates, and easy maintenance options.
* Hardware Durability: High-quality, durable hardware components are essential for long-term use in educational and research settings.

**Nationally Approved Driving Simulators**

* STISIM Drive
  + stisimdrive.com/solutions/
* Drive Safety DS-Series
  + drivesafety.com/clinical-driving-simulators-2/ds-250w/
* OKTAL
* AB Dynamics
  + abdynamics.com/driving-simulators/
* Virage Simulation VS300M
* Virage Simulation VS500M
  + viragesimulation.com
* FAAC Incorporated
  + www.faac.com/simulation-training/solutions/
* University of Iowa's National Advanced Driving Simulator (NADS)
  + dsri.uiowa.edu/nads-1
* Drive Safety DS-600 Series
  + drivesafety.com/research-driving-simulators/ds-600-2/
* STISIM Drive
  + stisimdrive.com/driver-training/

**APPLICATION** *(NHTSA standards will be used to evaluate all driving simulators)*

**󠄮** My driving simulator is listed on the Nationally Approved Driving Simulators

(Complete Section 1 and 3)

**󠄮** My driving simulator IS NOT listed on the Nationally Approved Driving Simulators

(Complete Section 1, 2, and 3)

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| **Section 1.**  School: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_  Simulator Name/Model:  Manufacturer:  Date of proposed Installation:  Location of Simulator within the classroom:  Number of Simulators:  Will all students have access to this simulator?  Describe the manufacturer technical support:  Describe the method of simulator training for other instructors:  Describe how system updates will be implemented: |
| **2. Section 2**  Provide a description how the proposed simulator meets each of the components of the NHTSA Standards below: **A. Realism and Fidelity:****B. Scenario Flexibility:****C. Data Collection and Analysis****D. Safety and Usability****E. Reliability and Maintenance:** |
| **Section 3.**  Submit the following:   * A copy of the user guide/manual * Photographs of the driving simulator including: location in classroom, in use, screen(s), seat. |

* I understand that two (2) hours of simulator driving equals one (1) hour of behind-the-wheel training.

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* I understand that TSD reserves the right to withdraw any approval of

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* I understand that any hours driven on an unauthorized simulator will not be credited towards any behind-the-wheel hours.

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Printed name), hereby certify that all information provided in this application is accurate and complete to the best of my knowledge.

**Signature**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**For Office Use Only:**

**TSD/TSC Review Approve\_\_\_\_\_\_\_\_\_\_\_\_ Denied\_\_\_\_\_\_\_\_\_\_\_\_**

TSC:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

TSC:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_