



GOODS AND SERVICES SUPPLY AGREEMENT

UTA CONTRACT #24-03914 BUS OPERATOR TRAINING SIMULATOR

THIS GOODS AND NON-PROFESSIONAL SERVICES SUPPLY AGREEMENT ("Contract") is entered into and made effective as of the date of last signature below. ("Effective Date") by and between UTAH TRANSIT AUTHORITY, a public transit district organized under the laws of the State of Utah ("UTA"), and Sim-Tech, a division of Excel Driver Services (the "Contractor").

RECITALS

WHEREAS, on January 17, 2025, UTA received competitive proposals to provide BUS OPERATIONS TRAINING SIMULATOR and (as applicable) all associated hardware, software, tools, installation services, commissioning and testing services, training and documentation (the "Goods and Services") according to the terms, conditions and specifications prepared by UTA in 24-03914 (the "RFP"); and

WHEREAS, UTA wishes to procure the Goods and Services according to the terms, conditions and specifications listed in the RFP (as subsequently amended through negotiation by the parties); and

WHEREAS, the "Sim-Tech Utah Transit Authority - RFP 24-03911 - Technical Proposal" submitted by the Contractor in response to the RFP ("Contractor's Proposal") was deemed to be the most advantageous to UTA; and

WHEREAS, Contractor is willing to furnish the Goods and Services according to the terms, conditions and specifications of the Contract.

AGREEMENT

NOW, THEREFORE, in accordance with the foregoing Recitals, which are incorporated herein by reference, and for and in consideration of the mutual covenants and agreements hereafter set forth, the mutual benefits to the parties to be derived here from, and for other valuable consideration, the receipt and sufficiency of which the parties acknowledge, it is hereby agreed as follows:

1. GOOD AND SERVICES TO BE PROVIDED BY CONTRACTOR

Contractor hereby agrees to furnish and deliver the Goods and/or Services in accordance with the Contract as described in Exhibit A (Statement of Work or Services) (including performing any installation, testing commissioning and other Services described in the Contract).

2. **TERM**

This Contract shall commence as of the Effective Date. The Contract shall remain in full force and effect for purchases of Goods and Services (made via purchase order or other agreed order method) during a TWO (2) - year period expiring June 1, 2027, UTA may, at its sole election and in its sole discretion, extend the initial term for up to Three (3) additional one-year option periods, for a total Contract period not to exceed FIVE (5) years. Extension options may be exercised by UTA upon providing Contractor with notice of such election at least thirty (30) days prior to the expiration of the initial term or then-expiring option period (as applicable). The Contract may be further extended if the Contractor and UTA mutually agree to an extension evidenced in writing. The rights and obligations of UTA and Contractor under the Contract shall at all times be subject to and conditioned upon the provisions of the Contract.

3. **COMPENSATION AND FEES**

UTA shall pay Contractor in accordance with the payment milestones or other terms described in Exhibit B. If Exhibit B does not specify any milestones or other payment provisions, then payment shall be invoiced after the Goods have been delivered and the Services have been performed. In no event shall advance payments be made.

4. **INCORPORATED DOCUMENTS**

- a. The following documents hereinafter listed in chronological order, with most recent document taking precedence over any conflicting provisions contained in prior documents (where applicable), are hereby incorporated into the Contract by reference and made a part hereof:
 1. The terms and conditions of this Goods and Services Supply Agreement (including any exhibits and attachments hereto).
 2. Contractor's Proposal including, without limitation, all federal certifications (as applicable);
 3. UTA's RFP including, without limitation, all attached or incorporated terms, conditions, federal clauses (as applicable), drawings, plans, specifications and standards and other descriptions of the Goods and Services;
- b. The above-referenced documents are made as fully a part of the Contract as if hereto attached or herein repeated. The Contract (including the documents listed above) constitute the complete contract between the parties.

5. **ORDER OF PRECEDENCE**

The Order of Precedence for this contract is as follows:

1. UTA Contract including all attachments
2. UTA Terms and Conditions
3. UTA Solicitation Terms
4. Contractor's Bid or Proposal including proposed terms or conditions

Any contractor proposed term or condition which is in conflict with a UTA contract or solicitation term or condition will be deemed null and void.

6. **LAWS AND REGULATIONS**

Contractor and any and all Goods and/or Services furnished under the Contract will comply fully with all applicable Federal and State laws and regulations, including those related to safety and environmental protection. Contractor shall also comply with all applicable licensure and certification requirements.

7. **INSPECTION, DELIVERY AND TRANSFER OF TITLE**

- a. Upon UTA's request, UTA's representative shall be provided access to Contractor's facilities to obtain information on production progress and to make inspections during the manufacturing or assembly process. Contractor will make reasonable efforts to obtain, for UTA, access to subcontractor facilities for the purposes described above. If the specifications include pre-shipment inspection requirements, Goods shall not be shipped until UTA or its designee has inspected the Goods, and authorized Contractor to proceed with the shipment.
- b. Delivery of the Goods is a substantial and material consideration under the Contract. Unless otherwise specifically set forth in the pricing schedule: (i) Contractor shall be solely responsible for the delivery of the Goods FOB to the delivery point specified in the Contract (or otherwise designated by UTA) and all costs related thereto are included in the pricing; and (ii) Contractor shall retain all liabilities and risk of loss with respect to the Goods until the Goods are delivered to, and accepted by, UTA.
- c. After delivery, the Goods shall be subject to inspection, testing and acceptance by UTA, including any testing or commissioning process described in the specifications. UTA shall have the right to reject any Goods or Services that are defective or do not conform to the specifications or other Contract requirements. Goods or Services rejected shall be replaced, repaired or re-performed so as to conform to the Contract (and to UTA's reasonable satisfaction). If Contractor is unable or refuses to correct such Goods within a time deemed reasonable by UTA, then UTA may cancel the order in whole or in part. Any inspection and testing performed by UTA shall be solely for the benefit of UTA. Neither UTA's inspection of the production processes, production progress and/or Goods or Services (nor its failure to inspect) shall relieve Contractor of its obligations to fulfill the requirements of the Contract, or be construed as acceptance by UTA.
- d. Contractor warrants that title to all Goods covered by an invoice for payment will pass to UTA no later than the time of payment. Contractor further warrants that upon submittal of an invoice for payment, all Goods and/or Services for which invoices for payment have been previously issued and payments received from UTA shall be free and clear of liens, claims, security interests or encumbrances in favor of Contractor or any subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided equipment, materials, and labor related to the equipment and/or work for which payment is being requested.

8. **INVOICING PROCEDURES**

- a. Contractor shall invoice UTA after achievement of contractual milestones or delivery of all Goods and satisfactory performance of all Services or in accordance with an approved progress or periodic billing schedule. Contractor shall submit invoices to ap@rideuta.com for processing and payment. In order to timely process invoices, Contractor shall include the following information on each invoice:
 - i. Contractor Name
 - ii. Unique Invoice Number
 - iii. PO Number
 - iv. Invoice Date
 - v. Detailed Description of Charges
 - vi. Total Dollar Amount Due
- b. UTA shall have the right to disapprove (and withhold from payment) specific line items of each invoice to address non-conforming Software or Services. Approval by UTA shall not be unreasonably withheld. UTA shall also have the right to offset (against payments) amounts reasonably reflecting the value of any claim which UTA has against Contractor under the Contract. Payment for all invoice amounts not specifically disapproved or offset by UTA shall be provided to Contractor within thirty (30) calendar days of invoice submittal to ap@rideuta.com . Invoices not submitted electronically will shall be paid thirty (30) calendar days from date of receipt by UTA's accounting department.
- c. Invoices must include a unique invoice number, UTA's Purchase Order number, a description of the Good or Service provided, line-item pricing, total amount due, and must be submitted electronically to ap@rideuta.com.

9. **WARRANTY OF GOODS AND SERVICES**

- a. Contractor warrants that all Goods (including hardware, firmware, and/or software products that it licenses) and Services shall conform to the specifications, drawings, standards, samples, and other descriptions made a part of (or incorporated by reference into) the Contract. Contractor further warrants that all Goods and Services shall be of the quality specified, or of the best grade if no quality is specified, and, unless otherwise provided in the Contract, will be new, and free from defects in design, materials and workmanship.
- b. Contractor warrants that all Goods and Services shall be in compliance with applicable federal, state, and local laws and regulations including, without limitation, those related to safety and environmental protection.

- c. At any time for a period of two (2) years from the date that all Goods have been delivered and all Services have been performed in accordance with the Contract, Contractor shall at its own expense promptly repair, replace and/or re-perform any Goods or Services that are defective or in any way fail to conform to the Contract requirements.
- d. If Contractor fails to promptly make any repair, replacement or re-performance as required herein, UTA may conduct the necessary remedial work at Contractor's expense. Contractor cannot void the warranty for repair, replacement or re-performance performed under these circumstances. Provided that such repair, replacement or re-performance is conducted in a reasonable manner and with workmanship and care consistent with industry standards, Contractor shall reimburse UTA for the cost of any warranty repair, replacement or re-performance self-performed by UTA.
- e. The foregoing warranties are not intended as a limitation, but are in addition to all other express warranties set forth in the Contract and such other warranties as are implied by law, custom, and usage of trade. Contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah apply to the Contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to the Contract unless otherwise specified and mutually agreed upon elsewhere in the Contract. In general, Contractor warrants that: (1) the Good will do what the salesperson said it would do, (2) the Good will live up to all specific claims that the manufacturer makes in their advertisements, (3) the Goods will be suitable for the ordinary purposes for which such items are used, (4) the Goods will be suitable for any special purposes that UTA has relied on Contractor's skill or judgment to consider when it advised UTA about the Good, (5) the Goods have been properly designed and manufactured, and (6) the Goods are free of significant defects or unusual problems about which UTA has not been warned. Nothing in this warranty will be construed to limit any rights or remedies UTA may otherwise have under the Contract.

10. **OWNERSHIP OF DESIGNS, DRAWINGS, AND WORK PRODUCT**

Any deliverables prepared or developed pursuant to the Contract including without limitation drawings, specifications, manuals, calculations, maps, sketches, designs, tracings, notes, reports, data, computer programs, models and samples, shall become the property of UTA when prepared, and, together with any documents or information furnished to Contractor and its employees or agents by UTA hereunder, shall be delivered to UTA upon request, and, in any event, upon termination or final acceptance of the Goods and Services. UTA shall have full rights and privileges to use and reproduce said items. To the extent that any deliverables include or incorporate preexisting intellectual property of Contractor, Contractor hereby grants UTA a fully paid, perpetual license to use such intellectual property for UTA's operation, maintenance, modification, improvement and replacement of UTA's assets. The scope of the license shall be to the fullest extent necessary to accomplish those purposes, including the right to share same with UTA's contractors, agent, officers, directors, employees, joint owners, affiliates and consultants.

11. **GENERAL INDEMNIFICATION**

Contractor shall indemnify, hold harmless and defend UTA, its officers, trustees, agents, and employees (hereinafter collectively referred to as “Indemnitees”) from and against all liabilities, claims, actions, damages, losses, and expenses including without limitation reasonable attorneys’ fees and costs (hereinafter referred to collectively as “claims”) related to bodily injury, including death, or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by the acts or omissions of Contractor or any of its owners, officers, directors, agents, employees or subcontractors. This indemnity includes any claim or amount arising out of the failure of such Contractor to conform to federal, state, and local laws and regulations. If an employee of Contractor, a subcontractor, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable brings a claim against UTA or another Indemnatee, Contractor’s indemnity obligation set forth above will not be limited by any limitation on the amount of damages, compensation or benefits payable under any employee benefit acts, including workers’ compensation or disability acts. The indemnity obligations of Contractor shall not apply to the extent that claims arise out of the sole negligence of UTA or the Indemnitees.

12. **INSURANCE REQUIREMENTS**

Standard Insurance Requirements

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The Utah Transit Authority in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this contract by the Contractor, his agents, representatives, employees or subcontractors and Contractor is free to purchase additional insurance as may be determined necessary.

A. **MINIMUM SCOPE AND LIMITS OF INSURANCE:** Contractor shall provide coverage with limits of liability not less than those Stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a “following form” basis.

1. Commercial General Liability – Occurrence Form

Policy shall include bodily injury, property damage and broad form contractual liability coverage.

- General Aggregate \$4,000,000
- Products – Completed Operations Aggregate \$1,000,000

- Personal and Advertising Injury \$1,000,000
- Each Occurrence \$2,000,000
- a. The policy shall be endorsed to include the following additional insured language:
"The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor".

2. Automobile Liability

Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

- Combined Single Limit (CSL) \$2,000,000
- a. The policy shall be endorsed to include the following additional insured language: "The Utah Transit Authority shall be named as an additional insured with respect to liability arising out of the activities performed by, or on behalf of the Contractor, including automobiles owned, leased, hired or borrowed by the Contractor".

3. Worker's Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	\$100,000
Disease – Each Employee	\$100,000
Disease – Policy Limit	\$500,000

- a. Policy shall contain a waiver of subrogation against the Utah Transit Authority.
- b. This requirement shall not apply when a contractor or subcontractor is exempt under UCA 34A-2-103, AND when such contractor or subcontractor executes the appropriate waiver form.

4. Contractors’ Pollution Legal Liability and/or Asbestos Legal Liability (if project involves environmental hazards) with limits no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate. *(NOTE: Projects over \$10,000,000 will require limits of \$2,000,000 per occurrence and \$4,000,000 aggregate; Projects over \$40,000,000 will require limits of \$5,000,000 per occurrence and \$5,000,000 aggregate)*

- B. **ADDITIONAL INSURANCE REQUIREMENTS:** The policies shall include, or be endorsed to include, the following provisions:
1. On insurance policies where the Utah Transit Authority is named as an additional insured, the Utah Transit Authority shall be an additional insured to the full limits of liability purchased by the Consultant. Insurance limits indicated in this agreement are minimum limits. Larger limits may be indicated after the consultant's assessment of the exposure for this contract; for their own protection and the protection of UTA.
 2. The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.
- C. **NOTICE OF CANCELLATION:** Each insurance policy required by the insurance provisions of this Contract shall provide the required coverage and shall not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to the Utah Transit Authority, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice shall be sent directly to (Utah Transit Authority agency Representative's Name & Address).
- D. **ACCEPTABILITY OF INSURERS:** Insurance is to be placed with insurers duly licensed or authorized to do business in the State and with an "A.M. Best" rating of not less than A-VII. The Utah Transit Authority in no way warrants that the above-required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.
- E. **VERIFICATION OF COVERAGE:** Contractor shall furnish the Utah Transit Authority with certificates of insurance (on standard ACORD form) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and any required endorsements are to be sent to utahta@ebix.com and received and approved by the Utah Transit Authority before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

All certificates required by this Contract shall be emailed directly to Utah Transit

Authority's insurance email address at utahta@ebix.com. The Utah Transit Authority project/contract number and project description shall be noted on the certificate of insurance. The Utah Transit Authority reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time. DO NOT SEND CERTIFICATES OF INSURANCE TO THE UTAH TRANSIT AUTHORITY'S CLAIMS AND INSURANCE DEPARTMENT.

- F. SUBCONTRACTORS: Contractors' certificate(s) shall include all subcontractors as additional insureds under its policies or subcontractors shall maintain separate insurance as determined by the Contractor, however, subcontractor's limits of liability shall not be less than \$1,000,000 per occurrence / \$2,000,000 aggregate. Sub-contractors maintaining separate insurance shall name Utah Transit Authority as an additional insured on their policy. Blanket additional insured endorsements are not acceptable from sub-contractors. Utah Transit Authority must be scheduled as an additional insured on any sub-contractor policies.
- G. APPROVAL: Any modification or variation from the insurance requirements in this Contract shall be made by Claims and Insurance Department or the UTA Legal Services, whose decision shall be final. Such action will not require a formal Contract amendment, but may be made by administrative action.

13. **OTHER INDEMNITIES**

- a. Contractor shall protect, release, defend, indemnify and hold harmless UTA and the other Indemnitees against and from any and all claims of any kind or nature whatsoever on account of infringement relating to Contractor's performance under the Contract. If notified promptly in writing and given authority, information and assistance, Contractor shall defend, or may settle at its expense, any suit or proceeding against UTA so far as based on a claimed infringement and Contractor shall pay all damages and costs awarded therein against UTA due to such breach. In case any Good or Service is in such suit held to constitute such an infringement or an injunction is filed that interferes with UTA's rights under the Contract, Contractor shall, at its expense and through mutual agreement between UTA and Contractor, either procure for UTA any necessary intellectual property rights, or modify Contractor's Goods and Services such that the claimed infringement is eliminated.
- b. Contractor shall: (i) protect, release, defend, indemnify and hold harmless UTA and the other Indemnitees against and from any and all liens or claims made or filed against

UTA on account of any Goods or Services furnished by subcontractors of any tier; and (ii) keep UTA property free and clear of all liens or claims arising in conjunction with any Goods or Services furnished under the Contract by Contractor or its subcontractors of any tier. If any lien arising out of the Contract is filed in conjunction with any Goods or Services furnished under the Contract, Contractor, within ten (10) calendar days after receiving from UTA written notice of such lien, shall obtain a release of or otherwise satisfy such lien. If Contractor fails to do so, UTA may take such steps and make such expenditures as in its discretion it deems advisable to obtain a release of or otherwise satisfy any such lien or liens, and Contractor shall upon demand reimburse UTA for all costs incurred and expenditures made by UTA in obtaining such release or satisfaction. If any non-payment claim is made directly against UTA arising out of non-payment to any subcontractor, Contractor shall assume the defense of such claim within ten (10) calendar days after receiving from UTA written notice of such claim. If Contractor fails to do so, Contractor shall upon demand reimburse UTA for all costs incurred and expenditures made by UTA to satisfy such claim.

- c. Contractor will defend, indemnify and hold UTA, its officers, agents and employees harmless from liability of any kind or nature, arising from Contractor's use of any copyrighted or un-copyrighted composition, trade secret, patented or un-patented invention, article or appliance furnished or used in the performance of the Contract.

14. **INDEPENDENT CONTRACTOR**

The parties agree that Contractor, in the carrying out of its duties hereunder, is an independent contractor and that neither Contractor nor any of its employees is or are agents, servants or employees of UTA. Neither Contractor nor any of Contractor's employees shall be eligible for any workers compensation insurance, pension, health coverage, or fringe benefits which apply to UTA's employees. Neither federal, state, nor local income tax nor payroll tax of any kind shall be withheld or paid by UTA on behalf of Contractor or the employees of Contractor. Contractor acknowledges that it shall be solely responsible for payment of all payrolls, income and other taxes generally applicable to independent contractors.

15. **STANDARD OF CARE.**

Contractor shall perform any Services to be provided under the Contract in a good and workmanlike manner, using at least that standard of care, skill and judgment which can reasonably be expected from similarly situated independent contractors (including, as applicable, professional standards of care).

16. **USE OF SUBCONTRACTORS**

- a. Consultant shall give advance written notification to UTA of any proposed subcontract (not indicated in Consultant's Proposal) negotiated with respect to the Work. UTA shall have the right to approve all subcontractors, such approval not to be withheld unreasonably.

- b. No subsequent change, removal or substitution shall be made with respect to any such subcontractor without the prior written approval of UTA.
- c. Consultant shall be solely responsible for making payments to subcontractors, and such payments shall be made within thirty (30) days after Consultant receives corresponding payments from UTA.
- d. Consultant shall be responsible for and direct all Work performed by subcontractors.

Consultant agrees that no subcontracts shall provide for payment on a cost-plus-percentage-of-cost basis. Consultant further agrees that all subcontracts shall comply with all applicable laws

17.

CONTRACTOR SAFETY COMPLIANCE

Contractor, including its employees, subcontractors, authorized agents, and representatives, shall comply with all UTA and industry safety standards, NATE, OSHA, EPA and all other State and Federal regulations, rules and guidelines pertaining to safety and environmental management, and will be solely responsible for any fines, citations or penalties it may receive or cause UTA to receive pursuant to this Contract. Each employee, contractor and subcontractor must be trained in UTA environmental and Safety Management principles. Contractor acknowledges that its Goods and Services might affect UTA's environmental obligations. A partial list of activities, products or Services deemed as have a potential environmental effect is available at the UTA website www.rideuta.com. Upon request by UTA, Contractor shall complete and return a *Contractor Activity Checklist*. If UTA determines that the Goods and/or Services under the Contract has the potential to impact the environment, UTA may require Contractor to submit additional environmental documents. Contractor shall provide one set of the appropriate safety data sheet(s) (SDS) and container label(s) upon delivery of a hazardous material to UTA.

ENVIRONMENTAL RESPONSIBILITY

Contractor acknowledges that its Goods and/or Services might affect UTA's ability to maintain environmental obligations. A partial list of activities, products or Services deemed as have a potential environmental effect is available at the UTA website www.rideuta.com. Upon request by UTA, Contractor shall complete and return a *Contractor Activity Checklist*. If UTA determines that the Goods and/or Services under the Contract has the potential to impact the environment, UTA may require Contractor to submit additional environmental documents. Contractor shall provide one set of the appropriate safety data sheet(s) (SDS) and container label(s) upon delivery of a hazardous material to UTA.

18.

19. ASSIGNMENT OF CONTRACT

Contractor shall not assign any of its rights or responsibilities, nor delegate its obligations, under this Contract or any part hereof without the prior written consent of UTA, and any attempted transfer in violation of this restriction shall be void.

20. **SUSPENSION OF WORK**

- a. UTA may, at any time, by written order to Consultant, require Consultant to suspend, delay, or interrupt all or any part of the Work called for by this Contract. Any such order shall be specifically identified as a "Suspension of Work Order" issued pursuant to this Article. Upon receipt of such an order, Consultant shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of further costs allocable to the Work covered by the order during the period of Work stoppage.
- b. If a Suspension of Work Order issued under this Article is canceled, Consultant shall resume Work as mutually agreed to in writing by the parties hereto.
- c. If a Suspension of Work Order is not canceled and the Work covered by such order is terminated for the convenience of UTA, reasonable costs incurred as a result of the Suspension of Work Order shall be considered in negotiating the termination settlement.
- d. If the Suspension of Work causes an increase in Consultant's cost or time to perform the Work, UTA's Project Manager or designee shall make an equitable adjustment to compensate Consultant for the additional costs or time, and modify this Contract by Change Order.

21. **TERMINATION**

- a. **FOR CONVENIENCE**: UTA shall have the right to terminate the Contract at any time by providing written notice to Contractor. If the Contract is terminated for convenience, UTA shall pay Contractor: (i) in full for Goods delivered and Services fully performed prior to the effective date of termination; and (ii) an equitable amount to reflect costs incurred (including Contract close-out and subcontractor termination costs that cannot be reasonably mitigated) and profit on work-in-progress as of to the effective date of the termination notice. UTA shall not be responsible for anticipated profits based on the terminated portion of the Contract. Contractor shall promptly submit a termination claim to UTA. If Contractor has any property in its possession belonging to UTA, Contractor will account for the same, and dispose of it in the manner UTA directs.
- b. **FOR DEFAULT**: If Contractor (a) becomes insolvent; (b) files a petition under any chapter of the bankruptcy laws or is the subject of an involuntary petition; (c) makes a general assignment for the benefit of its creditors; (d) has a receiver appointed; (e) should fail to make prompt payment to any subcontractors or suppliers; or (f) fails to comply with any of its material obligations under the Contract, UTA may, in its discretion, after first giving Contractor seven (7) days written notice to cure such default:
 1. Terminate the Contract (in whole or in part) for default and obtain the Goods and

Services using other contractors or UTA's own forces, in which event Contractor shall be liable for all incremental costs so incurred by UTA;

2. Pursue other remedies available under the Contract (regardless of whether the termination remedy is invoked); and/or
3. Except to the extent limited by the Contract, pursue other remedies available at law.

- b. **CONTRACTOR'S POST TERMINATION OBLIGATIONS** : Upon receipt of a termination notice as provided above, Contractor shall (i) immediately discontinue all work affected (unless the notice directs otherwise); and (ii) deliver to UTA all data, drawings and other deliverables, whether completed or in process. Contractor shall also remit a final invoice for all services performed and expenses incurred in full accordance with the terms and conditions of the Contract up to the effective date of termination. UTA shall calculate termination damages payable under the Contract, shall offset such damages against Contractor's final invoice, and shall invoice Contractor for any additional amounts payable by Contractor (to the extent termination damages exceed the invoice). All rights and remedies provided in this Article are cumulative and not exclusive. If UTA terminates the Contract for any reason, Contractor shall remain available, for a period not exceeding 90 days, to UTA to respond to any questions or concerns that UTA may have regarding the Goods and Services furnished by Contractor prior to termination.

22. **CHANGES**

- a. UTA's Project Manager or designee may, at any time, by written order designated or indicated to be a Change Order, direct changes in the Work including, but not limited to, changes:
 1. In the Scope of Services;
 2. In the method or manner of performance of the Work; or
 3. In the schedule or completion dates applicable to the Work.

To the extent that any change in Work directed by UTA causes an actual and demonstrable impact to: (i) Consultant's cost of performing the work; or (ii) the time required for the Work, then (in either case) the Change Order shall include an equitable adjustment to this Contract to make Consultant whole with respect to the impacts of such change.

- b. A change in the Work may only be directed by UTA through a written Change Order or (alternatively) UTA's expressed, written authorization directing Consultant to proceed pending negotiation of a Change Order. Any changes to this Contract undertaken by Consultant without such written authority shall be at Consultant's sole risk. Consultant shall not be entitled to rely on any other manner or method of direction.

- c. Consultant shall also be entitled to an equitable adjustment to address the actual and demonstrable impacts of “constructive” changes in the Work if: (i) subsequent to the Effective Date of this Contract, there is a material change with respect to any requirement set forth in this Contract; or (ii) other conditions exist or actions are taken by UTA which materially modify the magnitude, character or complexity of the Work from what should have been reasonably assumed by Consultant based on the information included in (or referenced by) this Contract. In order to be eligible for equitable relief for “constructive” changes in Work, Consultant must give UTA’s Project Manager or designee written notice stating:

1. The date, circumstances, and source of the change; and
2. That Consultant regards the identified item as a change in Work giving rise to an adjustment in this Contract.

Consultant must provide notice of a “constructive” change and assert its right to an equitable adjustment under this Section within ten (10) days after Consultant becomes aware (or reasonably should have become aware) of the facts and circumstances giving rise to the “constructive” change. Consultant’s failure to provide timely written notice as provided above shall constitute a waiver of Consultant’s rights with respect to such claim.

- d. As soon as practicable, but in no event longer than 30 days after providing notice, Consultant must provide UTA with information and documentation reasonably demonstrating the actual cost and schedule impacts associated with any change in Work. Equitable adjustments will be made via Change Order. Any dispute regarding the Consultant’s entitlement to an equitable adjustment (or the extent of any such equitable adjustment) shall be resolved in accordance with Article 20 of this Contract.

23. **INFORMATION, RECORDS and REPORTS; AUDIT RIGHTS**

Contractor shall retain all books, papers, documents, accounting records and other evidence to support any cost-based billings allowable under Exhibit B (or any other provision of the Contract). Such records shall include, without limitation, time sheets and other cost documentation related to the performance of labor services, as well as subcontracts, purchase orders, other contract documents, invoices, receipts or other documentation supporting non-labor costs. Contractor shall also retain other books and records related to the performance, quality or management of the Contract and/or Contractor’s compliance with the Contract. Records shall be retained by Contractor for a period of at least six (6) years, or until any audit initiated within that six-year period has been completed (whichever is later). During this six-year period, such records shall be made available at all reasonable times for audit and inspection by UTA and other authorized auditing parties including, but not limited to, the Federal Transit Administration. Copies of requested records shall be furnished to UTA or designated audit parties upon request. Contractor agrees that it shall flow-down (as a matter of written contract) these records requirements to all subcontractors utilized in the performance of the Contract at any tier.

24. FINDINGS CONFIDENTIAL

Any documents, reports, information, or other data and materials delivered or made available to or prepared or assembled by Contractor or subcontractor under this Contract are considered confidential and shall not be made available to any person, organization,

or entity by Contractor without consent in writing from UTA. If confidential information is released to any third-party without UTA's written consent as described above, contractor shall notify UTA of the data breach within 10 days and provide its plan for immediate

mitigation of the breach for review and approval by UTA.

a. It is hereby agreed that the following information is not considered to be confidential:

1. Information already in the public domain.
2. Information disclosed to Contractor by a third-party who is not under a confidentiality obligation.
3. Information developed by or in the custody of Contractor before entering into this Contract.
4. Information developed by Contractor through its work with other clients; and
5. Information required to be disclosed by law or regulation including, but not limited to, subpoena, court order or administrative order.

25. PUBLIC INFORMATION.

Contractor acknowledges that the Contract and related materials (invoices, orders, etc.) will be public documents under the Utah Government Records Access and Management Act (GRAMA). Contractor's response to the solicitation for the Contract will also be a public document subject to GRAMA, except for legitimate trade secrets, so long as such trade secrets were properly designated in accordance with terms of the solicitation.

26. PROJECT MANAGER

UTA's Project Manager for the Contract is MICHAEL CUMRINE, or designee. All questions and correspondence relating to the technical aspects of the Contract should be directed to UTA's Project Manager at UTA offices located at 669 West 200 South, Salt Lake City, Utah 84101, office phone (801) 2587-2243

27. CONTRACT ADMINISTRATOR

UTA's Contract Administrator for the Contract is RICK WILSON, or designee. All questions and correspondence relating to the contractual aspects of the Contract should be directed to UTA's Grants & Contracts Administrator at UTA offices located at 669 West 200 South, Salt Lake City, Utah 84101, office phone (801) 287-3016

28. CONFLICT OF INTEREST

Contractor represents that it has not offered or given any gift or compensation prohibited by the laws of the State of Utah to any officer or employee of UTA to secure favorable treatment with respect to being awarded the Contract. No member, officer, or employee of UTA during their tenure or one year thereafter shall have any interest, direct or indirect, in the Contract or the proceeds thereof.

29. **NOTICES OR DEMANDS**

a. Any and all notices, demands or other communications required hereunder to be given by one party to the other shall be given in writing and may be electronically delivered , personally delivered, mailed by US Mail, postage prepaid, or sent by overnight courier service and addressed to such party as follows:

<u>If to UTA:</u>	<u>If to Contractor:</u>
Utah Transit Authority	
ATTN: RICK WILSON	
669 West 200 South	
Salt Lake City, UT 84101	
rwilson@rideuta.com	

b. Either party may change the address at which such party desires to receive written notice of such change to any other party. Any such notice shall be deemed to have been given, and shall be effective, on delivery to the notice address then applicable for the party to which the notice is directed; provided, however, that refusal to accept delivery of a notice or the inability to deliver a notice because of an address change which was not properly communicated shall not defeat or delay the giving of a notice.

30. **CLAIMS/DISPUTE RESOLUTION**

- a. “Claim” means any disputes between UTA and the Contractor arising out of or relating to the Contract Documents including any disputed claims for Contract adjustments that cannot be resolved in accordance with the Change Order negotiation process set forth in Article 20. Claims must be made by written notice. The responsibility to substantiate claims rests with the party making the claim.
- b. Unless otherwise directed by UTA in writing, Contractor shall proceed diligently with performance of the Work pending final resolution of a Claim, including litigation. UTA shall continue to pay any undisputed payments related to such Claim.
- c. The parties shall attempt to informally resolve all claims, counterclaims and other disputes through the escalation process described below. No party may bring a legal action to enforce any term of this Contract without first having exhausted such process.
- d. The time schedule for escalation of disputes, including disputed requests for change order, shall be as follows:

Level of Authority	Time Limit
---------------------------	-------------------

UTA's Project Manager: Michael Cumrine	Five calendar days
Contractor's Project Manager	
UTA's Second Level: Stacey Palacios	Five calendar days
Contractor's [SECOND LEVEL]	
UTA's Third Level: Ann Green-Barton	Five calendar days
Contractor's [THIRD LEVEL]	

Unless otherwise directed by UTA's Project Manager, Contractor shall diligently continue performance under this Contract while matters in dispute are being resolved.

If the dispute cannot be resolved informally in accordance with the escalation procedures set forth above, then either party may commence formal mediation under the Juris Arbitration and Mediation (JAMS) process using a mutually agreed upon JAMS mediator. If resolution does not occur through Mediation, then legal action may be commenced in accordance the venue and governing law provisions of this contract.

31. **GOVERNING LAW**

The validity, interpretation and performance of the Contract shall be governed by the laws of the State of Utah, without regard to its law on the conflict of laws. Any dispute arising out of the Contract that cannot be solved to the mutual agreement of the parties shall be brought in a court of competent jurisdiction in Salt Lake County, State of Utah. Contractor consents to the jurisdiction of such courts.

32. **COSTS AND ATTORNEY FEES.**

If any party to this Agreement brings an action to enforce or defend its rights or obligations hereunder, the prevailing party shall be entitled to recover its costs and expenses, including mediation, arbitration, litigation, court costs and attorneys' fees, if any, incurred in connection with such suit, including on appeal

33. **SEVERABILITY**

Any provision of the Contract prohibited or rendered unenforceable by operation of law shall be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions of the Contract.

34. **AMENDMENTS**

Any amendment to the Contract must be in writing and executed by the authorized representatives of each party.

35. **FORCE MAJEURE**

Neither party to the Contract will be held responsible for delay or default caused by fire, riot, acts of God and/or war which are beyond that party's reasonable control. UTA may terminate the

Contract after determining such delay or default will reasonably prevent successful performance of the Contract.

36. **NO THIRD-PARTY BENEFICIARIES**

The parties enter into the Contract for the sole benefit of the parties, in exclusion of any third-party, and no third-party beneficiary is intended or created by the execution of the Contract.

37. **ENTIRE AGREEMENT**

This Contract shall constitute the entire agreement and understanding of the parties with respect to the subject matter hereof, and shall supersede all offers, negotiations and other agreements with respect thereto.

38. **COUNTERPARTS**

This Contract may be executed in any number of counterparts and by each of the parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument. Any signature page of the Contract may be detached from any counterpart and reattached to any other counterpart hereof. The electronic transmission of a signed original of the Contract or any counterpart hereof and the electronic retransmission of any signed copy hereof shall be the same as delivery of an original.

39. **NONWAIVER**

No failure or waiver or successive failures or waivers on the part of either party in the enforcement of any condition, covenant, or article of this Contract shall operate as a discharge of any such condition, covenant, or article nor render the same invalid, nor impair the right of either party to enforce the same in the event of any subsequent breaches by the other party.

40. **SALES TAX EXEMPT**

Purchases of certain materials are exempt from Utah sales tax. UTA will provide a sales tax exemption certificate to Contractor upon request. UTA will not pay Contractor for sales taxes for exempt purchases, and such taxes should not be included in Contractor's Application for Payment.

41. **UTAH ANTI-BOYCOTT OF ISRAEL ACT**

Contractor agrees it will not engage in a boycott of the State of Israel for the duration of this contract.

42. **SURVIVAL**

Provisions of this Contract intended by their nature and content to survive termination of this Contract shall so survive including, but not limited to, Articles 7, 9, 10, 11, 12, 13, 15, 17, 18, 19, 21, 23, 24, 25, 30, 31, 32, and 40.

IN WITNESS WHEREOF, the parties hereto have caused the Contract to be executed by officers duly authorized to execute the same as of the date of last signature below.

UTAH TRANSIT AUTHORITY:

By _____

Jay Fox

Executive Director

Date

By _____

Ann Green-Barton

Chief People Officer

Date

By _____

Stacey Palacios

Director Workforce Tech Training Date

DocuSigned by:
By Mike Bell
70E33A415BA44F6...

Mike Bell

UTA Legal Counsel

Date 4/28/2025

SIM-TECH/EXCEL DRIVER SERVICES:

Signed by:
By Steve Waymel
7A7D0603D2B6425...

Steven R Waymel

President

Date 4/25/2025

By _____

Name

Title

Date

Contract 24-03914 Exhibit A

UTA Bus Simulator Scope of Work

Introduction

1.1 Purpose and Scope

This document outlines the functional and technical requirements and specifications for a Transit Bus Training System (the “Simulator System”) to be installed at the Transit Agency.

The Contractor shall be responsible for the manufacture, supply, delivery, installation, testing, commissioning, training, documentation, and warranty. The Contractor shall be responsible for delivering a complete and working system as per the Agency’s requirements.

The Simulator System will be installed at the Specific Address of the Transit Agency.

The Simulator System shall include the following features:

- 1.2 High-end Simulator System with customized driver cab replicating a driving compartment of a 2023 Gillig Transit Bus (VIN#15GGD2712P3199826), including genuine OEM console and dash components.
- 1.3 The Operator’s cab must be a full-size, enclosed transit bus operator’s cab, including the driver’s seat, steering wheel, mirrors, instrument panel, dash, and floor-mounted controls.
- 1.4 The Simulator System shall provide a simulated vehicle to drive that is the conventional 40-foot length and an articulated 60-foot length.
- 1.5 The Contractor shall provide an uninterruptable power source (UPS) with battery backup per Simulator System.
- 1.6 The Contractor shall outline any applicable electric bus training programs currently available for use on the Simulator System.
- 1.7 The Simulator System shall provide an intelligent and realistic simulation of road traffic, pedestrian traffic, passengers boarding, car traffic, other transit traffic, etc. with high degree of realization.
- 1.8 The Simulator System shall provide the ability to develop customized training scenarios and situations through a user-friendly editor.
- 1.9 The Simulator System shall provide a pre-loaded catalog of scenarios available at the Instructor Station.

UTA Bus Simulator Scope of Work

- 1.10 The Simulator System shall provide an Auxiliary Driving Station to allow manual interaction by the instructor into the virtual environment using an included wheel and joystick and pedal set located at the Instructor Station. Instructor shall be able to control vehicle and pedestrian traffic.
- 1.11 The Instructor Station shall integrate all features and functionalities to manage and facilitate training to drivers, including reporting and scenario editors.
- 1.12 A stand-alone Viewing Monitor to provide additional trainees in the class a view of the scenario being driven in real-time.
- 1.13 All hardware, software, network, and office furniture.
- 1.14 Two yr. standard warranty and support, with options for up to 10 years extended warranty.
- 1.15 Warranty coverage should include preventative maintenance on an ongoing basis for the entire duration of the selected warranty period, with a local contractor presence.
- 1.16 Include Pneumatic Air System package, to ascertain knowledge of proper air brake tests and training, realistic feel of brakes, and for real air seat adjustment.

2 Project Arrangement

The project will be composed of two phases:

- 2.1 Phase 1 will include the manufacture, supply, delivery, installation, testing, commissioning, training, and documentation of the base Simulator System.
- 2.2 Phase 2 will focus on adding/enhancing customized features to the geo-specific virtual world and training environment.

All requirements stated in this document are part of Phase 1 unless otherwise explicitly noted as Phase 2. Final system acceptance at the end of Phase 1 will commence the Warranty and Support period.

3 Simulator System Components

General Room Arrangement:

- 3.1 The Simulator System shall be designed to efficiently fit the layout of the UTA Simulator Room (UTA shall provide the floor plan).
- 3.2 The Contractor shall provide a proposed layout drawing of the Simulator System within the room for approval prior to the manufacture of the Simulator System.

UTA Bus Simulator Scope of Work

- 3.3 The Simulator Room is climate controlled; The Simulator System components shall also have fans to maintain appropriate operating temperatures for the hardware.

4 Driver Cab

- 4.1 The Driver Cab shall be designed and constructed to replicate 2023 Gillig Transit Bus (VIN#15GGD2712P3199826), using high-quality materials. The Contractor shall be responsible for contacting and coordinating with the Gillig manufacturer to gather the proper information to reconstruct the full-size enclosed cab.
- 4.2 The Driver Cab shall be constructed with authentic materials and be of sturdy construction. The exterior of the Driver Cab enclosure shall be painted, or vinyl wrapped to match the UTA colors and design.
- 4.3 The entrance and exit of the Driver Cab shall be through the rear of the enclosure.
- 4.4 The Driver Cab shall include, at a minimum, a roof, flooring, enclosure openings, front passenger door, and windows.
- 4.5 The Driver Cab shall include 3 glass rear view mirrors – driver side, curb side, and interior center – of equal size, shape (flat glass) location, and control to that of the replicated 2023 Gillig Transit Bus (VIN#15GGD2712P3199826) bus model.
- 4.6 The Driver Cab glass mirrors shall provide accurate parallax and reflection of the Simulator System generated images, similar to that of an actual vehicle in operation at UTA. The driver side and curb side mirrors shall have a minimum dimension of 6” wide and 9” in height. Current fleet mirror configurations are as follows:
- -Driver-side: 8” wide x 15” tall
 - Curb-side: 9” wide x 13.5” tall
- 4.7 Convex mirrors (L/R) provide digital representations of the virtual training world a student would normally view.
- 4.8 The Driver Cab shall include a two-way radio for communicating with the Instructor Station.
- 4.9 The Driver Cab shall introduce physical obstructions as blind spots by the nature of its design to aid trainees in a real-world experience when operating the Simulator System.

UTA Bus Simulator Scope of Work

5 Driver Cab Enclosure

- 5.1 The Driver Cab Enclosure shall be designed to replicate the driver's compartment of the 2023 Gillig Transit Bus (VIN#15GGD2712P3199826) bus model.
- 5.2 The Driver Cab Enclosure will be realistically replicated to account for overall spatial layout of the cab, doors, windscreen, seat, steering wheel with horn, mirrors, dash, brake and accelerator pedals, parking brake, door interlock switch, indicators, and side console panel.
- 5.3 The Driver Cab Enclosure shall provide directional signal switches located on the floor and will function as in a typical bus. A headlight dimmer switch will be mounted on the floor of the Simulator Systems adjacent to the directional switches and will function as in a typical bus.
- 5.4 The Driver Cab Enclosure shall include genuine OEM products, and their placement shall be in the same locations as they exist in the actual vehicle.
- 5.5 The Driver Cab Enclosure shall be designed to comfortably accommodate persons with height ranging from 5'0" to 6'6" by being able to adjust the seat and steering wheel column accordingly.
- 5.6 The Driver Cab Enclosure shall include floor-mounted radio button that activates the Push-to-Talk feature to communicate with the Instructor Station.
- 5.7 The Driver Cab Enclosure shall be designed to include a space for the instructor to stand by the trainee (over the right shoulder) without obstructing any of the training environment screen views. This space shall allow for persons ranging from 5'0" to 6'6" in height to comfortably stand
- 5.8 The driver's seat shall be a genuine OEM seat found in 2023 Gillig Transit Bus (VIN#15GGD2712P3199826) Bus. The seat shall be fully operational, adjustable, and include a seatbelt.
- 5.9 The Driver Cab Enclosure shall have a full roof, physical A/B pillars offset from visual system to provide realistic operator training that requires movement in the seat to resolve viewing blockages caused by these physical structures.
- 5.10 The Driver Cab Enclosure shall be designed to include at least two fans for air circulation and cooling of the trainee.

6 Driver Cab Console

- 6.1 The Driver Cab dashboard and side console panel shall integrate genuine OEM products, replicating the desired UTA bus, 2023 Gillig Transit Bus (VIN#15GGD2712P3199826) Bus.

UTA Bus Simulator Scope of Work

- 6.2 All vehicle controls, indicators, and related components shall accurately replicate or simulate correct behavior dependent on the training exercise and driver interaction.
- 6.3 The following bus components shall be provided with integrated functions in the Simulator System:
- Full-size bus steering wheel with tilt, telescopic and horn functionality
 - Realistic horn sound logged in the reporting module and reproduced through the Simulator System audio system
 - Accelerator and brake pedals
 - Realistic tension and feedback based on the vehicle being driven
 - Adjustable driver's seat including seat belt and seat belt sensor
 - Comfortably accommodate persons from 5'0" to 6'6" in height
 - Seat belt sensor shall provide notifications to the Instructor Station if not being used during a training session by the trainee
 - Speedometer in miles per hour (MPH)
 - Door control
- 6.4 For operation with articulated and standard buses:
- Virtual front door shall open accordingly
 - All virtual doors opening shall be shown in the Simulator Software training environment
 - Door interlock system to prevent vehicle from moving when a door is open
 - Pressure, temperature, and status gauges
 - Parking brake
 - Washer and wiper control
- 6.5 Response shall be simulated in the Simulator Software training environment regardless of weather conditions:
- Lights
 - Simulator Software Environment shall illuminate based on the lighting function chosen
 - Turn signals
 - Transmission controls
 - Wheelchair ramp control
 - Kneeling control
 - Driver covert alarm
 - Telltale panel with indicator lights for all warnings and messages consistent with vehicle type

UTA Bus Simulator Scope of Work

- Fire suppression system status panel
- Emergency alarm
- Mounted gooseneck driver microphone

7 Situational Response Library

- 7.1 The Simulator System shall include an integrated situational response library for use by trainees.
- 7.2 The Response Library shall provide a real-world training catalog of scenarios to load on the simulator.
- 7.3 The Response Library shall be configured for operation from the Instructor Station.
- 7.4 The Simulator System's "Response" driving scenarios shall be inter-connected with the Response Simulator to enable the driver to experience both Simulators during a specified training exercise.
- 7.5 The trainee shall experience the Response Library from the operator's seat of the Driver Cab.
- 7.6 The trainee shall be recorded using the in-cab cameras along with capturing the trainee's commands and verbal cues for playback.
- 7.7 Playback of the audio and visual recording shall be available for viewing at the Instructor Station, Standalone Viewing Station, or from a Screen Display System on the Simulator System.

8 Motion System & Steering

- 8.1 The Driver Cab shall be equipped with a motion platform to provide realistic motion feedback through three degrees of freedom; pitch, roll, and heave.
- 8.2 The Simulator System shall provide real-time motion feedback based on the occurrences in the Simulator Software training environment.
 - 8.2.1 Motion feedback shall result from driving conditions such as hard braking, acceleration, contact with external objects, steering, wheel return and tire deflation.

UTA Bus Simulator Scope of Work

- 8.3 The motion platform shall provide three degrees of freedom only to the Driver Cab of the Simulator System. Motion shall not occur in the visual system to best replicate a realistic driving experience.
- 8.4 The steering column shall provide force feedback to simulate driving conditions; this may include contact with external objects, steering, wheel return, and tire deflation.

9 Audio and Screen Display System

- 9.1 The screen display system(s) shall be composed of multiple ultra-high-definition flat-panel monitors producing a continuous wraparound visual image of at least 300-degree horizontal field of view and at least 40-degree vertical field of view from the driver's viewpoint. The field of view shall be maintained in all adjustable positions of the driver's seat. There shall be three (3) rearview displays.
- 9.2 The screen display system(s) for the left-side view, middle-rear, and right-side view shall include three (3) ultra-high-definition flat panel monitors providing a minimum 40-degree horizontal field of view and a minimum of 30-degree vertical field of view through the mirrors from the driver's seat.
- 9.3 Each ultra-high-definition, flat-panel monitor's screen size shall be at least 60 inches diagonally.
- 9.4 The combined space and bezel between adjacent images on the monitors shall be less than one (1) centimeter.
- 9.5 The screen display system(s) shall provide a minimum 4K resolution with a minimum 60 Hz refresh rate.
- 9.6 Graphics shown on the screen display system(s) shall be rendered in 4K resolution on the screen display system(s).
- 9.7 The screen display system(s) shall be installed in such a way as to provide unobstructed entry and exit into the Driver Cab.

10 Audio System

- 10.1 The Driver Cab shall include an integrated surround sound Audio System composed of at least four (4) speakers located near the Driver Cab.

UTA Bus Simulator Scope of Work

- 10.2 Each speaker shall have at least five (5) Watts of power with associated amplifier to support the total system power output. The system as a whole, shall output at least 95 dB of sound.
- 10.3 The Audio System shall provide simulated sounds of the following:
- Engine, dependent on Revs Per Minute (RPM) if applicable
 - Rolling noise, dependent on roadway material
 - Pneumatic brake
 - Horn
 - Door operations
 - Turn signals
 - Alarms
 - Stop request
 - Collisions
 - Skidding, slipping
 - Weather conditions
 - Passengers speaking to each other on the vehicle
 - Passenger yelling/crying/screaming
 - Other traffic vehicles and pedestrians
- 10.4 The Audio System volume controls shall be accessible through the Instructor Station.
- 10.5 The Instructor Station shall also include a microphone allowing for two-way communication between the Instructor Station and the Driver Cab.
- 10.6 The Audio System shall record verbal exchanges as part of the audio/video playback of the reporting module.

UTA Bus Simulator Scope of Work

11 Camera System

- 11.1 The Driver Cab Enclosure shall include two (2) Closed Circuit Television (CCTV) cameras. Each camera shall be in a fixed position, full-color high-definition (minimum 1080p) network camera.
- 11.2 The cameras shall output the recorded feed to the Instructor Station and Stand-Alone Viewing Station.
- 11.3 The cameras shall also allow for recorded video and playback to be synced with the playback of the trainee's drive within the virtual environment.

12 Instructor Station

- 12.1 The Simulator System shall include an Instructor Station which will allow monitoring, control, and configuration of the Simulator Systems in real time, including training exercises, Auxiliary Driving Station, driving conditions, vehicle types, CCTV camera, reporting, database management, and user profiles.
- 12.2 The Instructor Station shall include but not be limited to the following components:
 - Wireless keyboard and mouse
 - Minimum two (2) 27-inch high-definition flat panel monitors
 - Computer programming unit (CPU) designed to exceed requirements of the Simulator System
 - Minimum 500 GB of free hard drive space after all software installation
 - One (1) office desk and one (1) chair to accommodate the Instructor Station and related peripherals
- 12.3 The Instructor Station shall allow for the following conditions to be changed dynamically in the standard virtual training world and geo-specific training environment to a random or configurable condition from the Instructor Station:
 - Time and weather conditions
 - Traffic conditions
 - Transit vehicle conditions

UTA Bus Simulator Scope of Work

- 12.4 All training environment conditions shall be configurable from the Wireless Instructor Tablet.
- 12.5 All computer-generated vehicles and pedestrians shall operate with a high degree of artificial intelligence, simulating real-world actions and reactions to all other static and dynamic elements in the simulation including the trainee simulation vehicle and Auxiliary Driving Station vehicle, or pedestrian.
- 12.6 The time in the training environment shall be configurable to include the following times of day:
 - Daylight hours
 - Nighttime hours
 - Sunrise/sunset (sun in driver's sightline)
- 12.7 The weather in the training environment shall be configurable to include the following weather types in both daylight and nighttime lighting conditions:
 - Sunny
 - Overcast
 - Rain – adjustable from light to heavy
 - Snow – adjustable from light to heavy and drifting with minimal visibility
 - Rain/Snow mix – adjustable from light to heavy
 - Fog – adjustable from light to heavy
 - Freezing rain – adjustable from light to heavy
 - Ice pellets – adjustable from light to heavy
- 12.8 The type and level of the weather shall affect driving conditions, road conditions, visibility, and windshield buildup (as with ice and snow) accordingly.
- 12.9 The Instructor Station shall provide a graphical user interface (GUI) which will include but not be limited to the following functionality:
 - Load or Shutdown the Simulator System
 - Start, stop, pause, restart, and replay any position within a training exercise

UTA Bus Simulator Scope of Work

- Activate or deactivate any driving conditions
- Administrative and user management
- Generate performance reports based on the automated assessment from the Simulator System and manual input from the instructor
- Mark locations within a training exercise for follow up review
- Activate or configure the Auxiliary Driving Station
- Record and playback training exercises
- Access the CCTV camera for live viewing or recall recorded video

12.10 The Instructor Station shall be equipped with a portable wireless Instructor tablet (minimum 8” screen size) and associated software and charging cables to allow for mobile operation and oversight during training sessions.

12.11 The wireless tablet shall be able to perform at a minimum, the following capabilities:

- Adjust time of day (daytime and dark/nighttime driving)
- Weather effects (sunshine, cloudy, light, and heavy rain, light and heavy snow, fog dust)
- Traffic (aggressiveness, density)
- Wind (direction, magnitude)
- Road traction (traction coefficient slider)
- Start and shutdown the Simulators
- Start, stop, and pause training exercises
- Activate and stop recording of the driver’s cab
- Prompt review video of the ongoing or most recent training sessions
- View activities in one, two, three, or all four drivers cabs that are in use at any given time
- Sun glare should be automatically adjusted based on the time of day

UTA Bus Simulator Scope of Work

12.12 The Instructor Station shall provide the ability to record, store, and report various parameters within training exercises. These parameters shall include but not be limited to the following:

- Trainee name
- Trainee user ID
- Instructor name
- Time and date
- Start and stop time of exercise
- Trainee performance (objects hit, bus stop markers missed, etc.)
- Average speed and speed limit adherence
- Fuel consumption (simulated)
- Battery depletion and energy used
- Average following distance
- Braking performance
- Lane positioning
- Instructor comments
- Hard braking occurrences
- Hard acceleration occurrences

12.13 The reporting tool shall be configured to output the above-mentioned parameters in a report format customized to UTA's needs.

12.14 The Simulator System shall provide for an unlimited number of customized training exercises to be configured and saved in the system.

12.15 The Simulator System shall provide a database capable of storing a minimum of 1,000 individual trainee records.

13 Operator Assessment Tools

13.1 The Simulator System shall provide a tool for assessment of a trainee's performance following a driving scenario in the Simulator System.

UTA Bus Simulator Scope of Work

- 13.2 The Assessment Tool shall include a pre-loaded scenario package.
- 13.3 The Assessment Tool provide a dashboard that monitors different features unique to an electric bus for review with the trainee following a drive.
 - 13.3.1 The Assessment Tool shall monitor speed, acceleration, braking, vehicle lane position and turn signal use.
- 13.4 The Assessment Tool shall provide zones that categorically provide a negative, positive, needs improvement assessment of the conformance to UTA policies.

14 Auxiliary Driving Simulator Station

- 14.1 The Auxiliary Driving Simulator Station shall provide the ability to control a simulated vehicle or pedestrian in the virtual training environment which will be used to interact with the trainee.
- 14.2 The simulated vehicle or pedestrian shall have the ability to be placed anywhere in the virtual training environment or by selecting an existing vehicle or pedestrian in the environment.
- 14.3 The Auxiliary Driving Simulator Station shall be activated or deactivated by the Instructor Station.
- 14.4 The Auxiliary Driving Simulator Station shall include but not be limited to:
 - Minimum of one (1) 27-inch high-definition flat panel monitor
 - Desktop-based steering wheel, turn signals, and automatic transmission control
 - Brake and accelerator pedals
 - Joystick for pedestrian movement
- 14.5 The Auxiliary Driving Simulator Station shall be configured to include and resemble the following vehicles:
 - Standard Bus
 - Articulated Bus
 - Ambulance
 - SUV type vehicle

UTA Bus Simulator Scope of Work

- Taxicab
- Unmarked sedan
- Tractor trailer
- Motorcycle
- Bicycle

14.6 The Auxiliary Driving Simulator Station shall be configured to include and resemble the following pedestrians:

- Adult man
- Adult woman
- Child
- Construction worker
- Crowd of college students (minimum 20 students)
- Fire Fighter
- Paramedic
- Person walking a pet
- Person walking with stroller
- Police Officer
- Person using wheelchair/scooter

15 Stand-Alone Viewing Station

- 15.1 The Simulator System shall include a Stand-Alone Viewing Station to allow observers to follow the actions of the trainee while using the Simulator System.
- 15.2 The Viewing Station shall consist of one (1) 70-inch ultra-high-definition flat panel monitor. The Contractor shall propose a mounting location within the Training Room or a rolling monitor stand.
- 15.3 The Viewing Station shall allow any of the following views of real time or recorded training exercises, configurable by the Instructor Station:

UTA Bus Simulator Scope of Work

- Fixed overhead view
- Driver forwards field of view
- CCTV camera view
- Custom view (changeable side or overhead vantage point)
- Response Simulator playback

16 Simulated Vehicle Types

16.1 The Simulator System shall accurately replicate the following vehicle types and provide realistic interaction with the simulated training environment:

- Standard Bus types

16.2 The interiors of the selected vehicle types shall be replicated on any screen display system showing the interior.

16.3 The simulated vehicle types shall respond to user inputs through the system and provide an accurate representation of all vehicle sub systems and components, including:

- Steering
- Engine performance, acceleration and deceleration based on diesel propulsion
- Suspension
- Turning radius
- Vehicle weight
- Braking performance
- Tire adhesion
- Transmission performance and control
- Aerodynamic properties
- Electrical systems including lights and turn signals
- Diesel exhaust fluid system lockout/warning

UTA Bus Simulator Scope of Work

- Bicycle racks

17 Customized Region of UTA Training Environment

- 17.1 The Contractor shall develop a geo-specific virtual training environment that consists of areas and features that are similar to those found in the Salt Lake area. The Contractor shall visit all areas that are identified to assist in developing the environment.
- 17.1.1 The Contractor shall provide fifty (40) custom scenarios for use within the geo-specific virtual training environment. These shall be created in concert with the UTA training staff. The scope of services shall be discussed with the vendor in detail after award of the contract.
- 17.2 The Contractor shall include all virtual content in one loadable training environment map.

18 Training Environments (Standard Pre-Developed Scenarios)

- 18.1 The four (4) training environments shall be:
- Downtown/urban areas
 - Suburban/rural areas
 - Safety/practice areas
 - Maintenance facility area
- 18.2 The downtown/urban training environment shall provide an accurate representation of driving conditions in a built-up urban area. The urban training environment shall include the following simulated components and characteristics:
- Heavy vehicle and pedestrian traffic conditions
 - Frequent controlled intersections
 - Frequent bus stops
 - High concentration of buildings
 - Construction zones with lane reductions

UTA Bus Simulator Scope of Work

- Cyclists
- Multi-lane roads with side curbs and center medians
- Parked cars on both sides
- Intersections including 3-way and 4-way, various lane configurations
- Expressway overpass style on/off ramps and bridges
- Rail level crossings

18.3 The suburban/rural training environment shall provide an accurate representation of driving conditions in a suburban area:

- Medium to heavy vehicle traffic conditions
- Light to medium pedestrian traffic conditions
- Wider intersection spacing
- Less frequent bus stops
- Lower density buildings
- Industrial parks
- School zones
- Parks
- Residential neighborhoods
- Shopping malls
- Controlled and uncontrolled intersections
- Construction zones with lane reductions
- Cyclists
- Multi-lane highways with light to heavy traffic conditions and entrance and exit ramps
- Varying speed limits on highways
- Multi-lane roads with side curbs and center medians
- Parked cars on both sides

UTA Bus Simulator Scope of Work

- Intersections including 3-way and 4-way, various lane configurations
- Expressway overpass style on/off ramps and bridges
- Rail level crossings
- Winding roads
- Two-lane roads with side ditches
- Rural obstacles such as guideposts, mailboxes
- Gravel road shoulders
- Traffic round-a-bouts

18.4 The safety/practice training environment shall be composed of, at a minimum, an open-paved area allowing for a configurable pylon, cones, and poles layout to practice vehicle maneuverability skills, this includes:

- Left turns
- Right turns
- Serpentine formation
- Offset
- Diminishing clearance

18.5 The Maintenance Facility training environment should be composed of an enclosed, paved garage with four (4) automatic doors with three (3) unmarked one-way travel lanes per door, allowing for configurable parked buses, pallets of equipment, and other industrial obstacles commonly found in vehicle storage facilities. Other characteristics to include:

- One-way drive-thru wash bay
- Maintenance bay with lifts

19 Traffic Conditions

19.1 The Simulator System training environment shall allow the ability to dynamically adjust traffic conditions using the Instructor Station.

UTA Bus Simulator Scope of Work

- 19.2 The Simulator System training environment shall allow the ability to dynamically adjust traffic behavior from “normal” to “aggressive” and vice versa. This should affect how vehicles and pedestrians obey traffic signals, pedestrian signals, speed limits, acceleration/deceleration, jaywalking tendencies, and lane changes accordingly.
- 19.3 Pedestrians shall behave in an autonomous fashion and react to the trainee and/or instructor vehicles in a realistic manner which includes:
- Walking along sidewalks and crossing streets
 - Populate transit stops
 - Flag transit vehicles to stop from inside the vehicle and outside the vehicle
 - Boarding and alighting vehicles
 - Run to catch a bus
- 19.4 The Instructor Station shall have the ability to trigger a passenger request to board the vehicle.
- 19.5 Non-transit vehicles shall not be able to drive on any dedicated bus laneways except for user- controlled Auxiliary vehicles.
- 19.6 The Simulator System shall provide the ability to control the movements of a single Auxiliary vehicle or pedestrian within the training environment.

20 Transit Vehicle Conditions

- 20.1 The Simulator System shall provide the ability to dynamically initiate vehicle malfunctions and react accordingly. Malfunctions shall include but not be limited to the following:
- Tire Failure
 - Tire Blowout
 - Brake Failure
 - Engine Overheat
 - Oil Pressure Drop

UTA Bus Simulator Scope of Work

- Check Engine Light
- Fuel Leak
- Fires
- Loose Lug Nuts
- Loss of Engine Power
- Emergency Interlock
- Coolant Leak
- Low Alternator
- Hot Transmission
- Engine Stall
- Traffic Events (Lane Cross, Stale Green, AV Stop)
- Clear Vehicle Damage
- Passenger Stop Request

20.2 All malfunctions shall be displayed correspondingly in the Simulator System Driver Cab console and screens, as applicable.

20.3 The Simulator System shall provide the ability to place trainee vehicles “in-service” or “out-of- service,” which will require trainees to pick up and drop off passengers accordingly at bus stops and terminals.

20.4 All malfunctions listed shall be available for use from the Wireless Instructor Tablet.

21 Training Exercises and Scenarios

21.1 The base Simulator System shall include a minimum of 70 pre-loaded training scenarios. Training scenarios shall be configured with appropriate constraints, objectives, and limits to allow for proper analysis and results.

21.1.1 In addition to the at least fifty (70) pre-loaded scenarios, the Contractor shall provide forty (40) custom scenarios for use within the virtual training environment. These shall be created in concert with the UTA training staff. The scope of services shall include the development of the following scenarios:

UTA Bus Simulator Scope of Work

- Up to ten (10) scenarios for various merging/turning/reversing scenarios
- Up to three (3) scenarios which focus on utilizing the side-view mirrors
- Up to five (5) scenarios for various bus stop pick-ups
- Up to seven (7) scenarios for defensive driving tactics
- Up to ten (10) scenarios for corrective action
- Up to two (2) scenarios for transit bicycle racks
- Up to three (3) timed road courses which shall utilize a combination of at least five (5) scenarios

21.2 Training exercises shall include the option of inserting the following objects into the environment and scripting their behavior based on triggers such as trainee vehicle location or speed.

- Pedestrians
- Cyclists
- Cars
- Animals (deer, dogs, cats)

21.3 Emergency vehicles During a training exercise, the Simulator System shall allow the instructor to start, pause, reset, or move the vehicle to a specified location on the route.

21.4 During a training exercise, the Simulator System shall provide the option to allow the instructor to ignore any driver faults.

21.5 The Instructor shall have the ability to override any actions to prematurely end, restart or continue a training exercise.

21.6 The Instructor shall have the ability to reset a training exercise to an intermediate point in the exercise.

21.7 During a training exercise, the Simulator System shall allow the instructor to start, pause, reset, or move the vehicle to a specified location on the route.

21.8 During a training exercise, the Simulator System shall provide the option to allow the instructor to ignore any driver faults.

UTA Bus Simulator Scope of Work

- 21.9 The Instructor shall have the ability to override any actions to prematurely end, restart or continue a training exercise.
- 21.10 The Instructor shall have the ability to reset a training exercise to an intermediate point in the exercise.

22 Scenario Building Training Tool

- 22.1 The Simulator System shall include a user-friendly software program to allow the instructor to develop customized training exercises or modifying existing. This tool shall include, but not limited to, the ability to add obstacles, follow a defined route, and set constraints.
- 22.2 The Simulator System shall allow for an unlimited number of training exercises to be developed and saved.

23 Training

- 23.1 The Contractor shall be responsible to train UTA designated personnel according to the requirements specified herein. Operations and Maintenance Training shall be for the UTA lead instructors and not to exceed 15 personnel.
 - 23.1.1 The Contractor shall provide scenario editing training to UTA lead instructors and not to exceed five (5) personnel.
- 23.2 Training shall take place at UTA designated facilities.
- 23.3 Instruction shall cover equipment familiarization and systems operation. The minimum training is that which is necessary to bring those employees designated to the level of proficiency required for performing their respective duties.
- 23.4 The Contractor shall provide experienced and qualified instructors to conduct all training sessions. The Contractor is responsible for ensuring that the instructors teaching these courses are not only familiar with technical information but are able to utilize proper methods of instruction, training aids, audiovisuals, and other materials to provide for effective training.
- 23.5 The Contractor shall provide Instructional materials consisting of applicable equipment operation and maintenance manuals.

UTA Bus Simulator Scope of Work

- 23.5.1 All training materials are to become the property of UTA at the conclusion of training.
- 23.6 The Contractor shall provide additional training sessions at the contract price per session.
- 23.7 The following summarizes the minimum training that shall be provided. The contractor shall propose a training program that outlines the topics covered for each item listed below. Training for both items can take place consecutively.
- Operation and Maintenance Training
 - Scenario Building/Editing Training

24 Final System Acceptance

- 24.1 After installation, the Contractor shall perform a final system acceptance test with the UTA.

25 Training Manuals

- 25.1 Training manuals shall be provided for each training participant.

The manuals shall provide information on all the topics covered during each of the training sessions and include exercises and screen captures.

26 Warranty and Support

- 26.1 The Contractor shall be the warrantor of all system components, notwithstanding any manufacturer's warranties whether written or implied.
- 26.2 All installed equipment shall have the basic manufacturer's warranty extended to cover a period of Two (2) years from the date of Final System Acceptance. The warranty shall cover any defects, failures, or malfunctions in materials and workmanship for all system components.
- 26.3 The Contractor shall provide all labor, parts, transportation, expenses, testing equipment, software, and incidentals necessary to provide warranty and support for all elements of the system, including a physical presence in the greater Salt Lake Metro area.

UTA Bus Simulator Scope of Work

26.4 The warranty shall include the following support services, to be provided by the Contractor:

- 8:00 A.M. to 5:00 P.M. (CST), Monday through Friday telephone technical support line
- Maximum of three (3) business day on-site response time for issues that can't be resolved or repaired over the phone
- On-site troubleshooting, removal, replacement, repair, re-configuration and testing as required to maintain the system in good operating condition

26.5 The vendor will provide quarterly preventive maintenance visits on an ongoing basis for the entire duration of warranty and service agreements as required to maintain the system in good operating condition.

26.6 There shall be no repair cost applied to UTA for warranted equipment, over the warranty period, unless there is reasonable evidence of damage due to misuse, negligence, improper operation or handling, or willful attack. This shall include all equipment, software, and services performed by the Contractor or any of their sub-contractors.

26.7 The Contractor shall provide a per year rate for providing warranty and support services after the initial warranty period has expired for an additional three plus years, up to and including ten years 3-10) years.

27 Past Performance & Qualifications

27.1 "The Proposer to provide the required product or service by demonstrating competence in the performance of services to be provided. Proposers should identify or provide any record(s) of satisfactory performance on similar contracts and supportive client references. Provide examples of similar contracts that the Proposer has undertaken (indicating status of the contract) within the last two years. For each reference cited as related experience, furnish the name, title, address, and telephone number of the person(s) at the purchaser's organization who is the most knowledgeable about the work performed.

27.2 Please identify what you believe are the primary characteristics that differentiate your firm from others in the market and explain why your company is uniquely positioned to work successfully with the UTA.



Sim-Tech
SIMULATION TECHNOLOGY



***Designed Exclusively
For
Utah Transit Authority
Price Proposal
RFP#24-03911***



A DIVISION OF
EXCEL
DRIVER SERVICES



Mr. Rick Wilson | Contract Administrator
Utah Transit Authority
Attn: rwilson@rideuta.com
O: 801-287-3016

08 May 2025

RE: Simulator Pricing Outline and Specifications

Sim-Tech is excited to work closely with the Utah Transit Authority regarding our "smart" Omega-Series bus simulation and training tools. Sim-Tech provides the "best" overall "smart" integrated simulation training solution and we would be very grateful and humbled to work with your team.

Please note: We offer at no additional cost a two-year full warranty that includes quarterly preventive maintenance visits on-site, per year. The Omega closed cab bus simulator includes a true OEM dash, seat, two cockpit fans, and radio system, with an OEM steering wheel with hard-stop capability. We also include the pneumatic air system for a true air-brake feel. Our system includes an Omega-designed 3-DOF motion platform tuned for transit bus training, as well as a 70" classroom LED panel, After Action Review (AAR) camera system that enables you to review each driver's performance. This project also includes a Utah geo-specific driving world with 40 custom-built training scenarios that will be very realistic and compelling for the student and greatly increase the training value. Also included standard is our 100+ mile radius geo-typical N. American driving database with 70+ pre-developed transit bus scenarios, Meta VR headset driver training, and bus policy and procedures training system, the VR headset can also be used for switching between large LED screen mode to VR viewing mode as desired.

Please contact me directly at 801-654-4095 (cell), or by email at cwoodbury@sim-tech.us with any questions. On behalf of Sim-Tech, we look forward to working with you and getting the most out of using a "smart" Sim-Tech simulator for your long-term driver training at the UTA.

Respectfully,

Clayne A. Woodbury
801-654-4095
Sim-Tech Simulation Division
VP of Sales
cwoodbury@sim-tech.us

Omega UTA Transit Bus Price Schedule Sheet

Description	Price	Qty	Subtotal
<input checked="" type="checkbox"/> ST - Omega Series™ Transit Bus Driving Simulator Omega Full-Sized, Closed Cab Series™ Transit Bus Driving Simulator Featuring Real OEM Components, sound, and horn delivered and installed - VIN# Specific OEM Dash Panels Closed Chassis -Equipped with diesel, alternative fuel, Battery Bus Vehicle Dynamics - Forward OEM Specified & Left side switch console - OEM Steering Wheel / Pedal Set - 2-Year Warranty Included in the purchase	\$275,000	1	\$275,000
<input checked="" type="checkbox"/> ST - Pneumatic Air System Package Model# DL-AIRSYS-V1 Air Compressor and dual air tanks - Air-ride seat - Pneumatic park brake - Pneumatic trailer brake - Pneumatic service brake air release	\$3,000	1	\$3,000
<input checked="" type="checkbox"/> ST - Omega Series™ Driving Simulator 2nd Year Extended Warranty 2nd year extended warranty for the Omega Simulator - Includes 1 annual preventive maintenance visit each year.	\$10,000	1	\$10,000 \$0 Discount -100%

* Prices do not include Federal, State, Local or Use taxes, VAT or foreign duties, if any, which are the responsibility of the purchaser.

Description	Price	Qty	Subtotal
<input checked="" type="checkbox"/> ST - Omega Series™ Driving Simulator Motion Package Omega Series™ Driving Simulator Motion Package 3 Degree of Freedom (3DOF) Quad Electronic Screw Actuators 1.5" Total Travel	\$20,000	1	\$20,000
<input checked="" type="checkbox"/> Custom UTA Road Database As Specified By Sim-Tech & UTA Working Together	\$180,000	1	\$180,000
<input checked="" type="checkbox"/> 40 Custom-Built UTA Transit Scenarios Within The Custom UTA Database	\$2,000	40	\$80,000
<input checked="" type="checkbox"/> ST - 2-Way Radio Communication Wired communication allows the instructor to communicate with operators from the instructor's station	\$4,000	1	\$4,000
<input checked="" type="checkbox"/> ST - Portable Microsoft Surface Pro or equivalent (computer-based tablet for Microsoft technology)	\$2,000	1	\$2,000
<input checked="" type="checkbox"/> ST - Custom Vinyl Wrap UTA Logo Colors	\$10,000	1	\$10,000
<input checked="" type="checkbox"/> ST - Raptor Series™ Desktop Driving Simulator Raptor Series™ Desktop Driving Simulator Single Monitor	\$12,500	1	\$12,500

*** Prices do not include Federal, State, Local or Use taxes, VAT or foreign duties, if any, which are the responsibility of the purchaser.**

Description	Price	Qty	Subtotal
<input checked="" type="checkbox"/> ST - Scenario Creation & Editing Tool (Sim-Master) Fully create new or modify existing scenarios	\$5,000	1	\$5,000
<input checked="" type="checkbox"/> ST - UPS Power Surge Protection Model# OMEGA-SP	\$875	1	\$875 \$787.50 Discount -10%
<input checked="" type="checkbox"/> ST - Classroom 70" LCD Panel Model #Secondary Screen Classroom - Wall Mountable or Available on Roller Wheels	\$1,850	1	\$1,850
<input checked="" type="checkbox"/> ST - Meta 3 VR Goggle Kit Student Incident Instruction Curriculum System Model# Sim-Tech VR System (Incident Instruction Transit) - Includes in-cab touchscreen for students to interact with programmed Avatars in learning UTA policies and procedures training in accident response, on-board incidents, etc. - Includes EV bus training feedback on the in-cab touchscreen to monitor student performance.	\$15,000	1	\$15,000
Total			\$609,137.50
Total Savings			\$10,087.50

*** Prices do not include Federal, State, Local or Use taxes, VAT or foreign duties, if any, which are the responsibility of the purchaser.**

Simulator Extended Warranty Package Pricing (Optional)

Description	Price	Qty	Subtotal
<input checked="" type="checkbox"/> ST - Omega Series™ Transit Bus Driving Simulator Warranty Extension 3-Year Additional Extended Warranty **Can Add Additional Years To The Warranty Coverage As Desired.	\$10,000	3	\$30,000
Total			\$30,000

Meta 3 AUGMENTED REALITY HEADSET PACKAGE VR KIT

Model # GSVRV1

1. High-resolution, rugged, and ergonomic VR Headset
2. 200° Diagonal Field of View (FOV) is almost twice as wide as typical VR systems, to realistically render side roads and surrounding vehicles in the student's peripheral vision
3. Additional stereoscopic headset-mounted camera unit captures the "See-Thru" image
4. Real-time automatic depth-sensing (no green screen required)
5. Integrated audio headgear
6. Two infrared base stations for precise tracking of head position and rotation
7. Replaceable comfort face pad

Going well beyond conventional Virtual Reality (VR), our Augmented Reality (AR) technology adds a stereoscopic camera system with lenses aligned with the student's own eyes. The camera system captures images of the student's own body sitting in the physical simulator cab.

Our unique UniTrainer™ software then blends real-life camera images with photorealistic 3D graphics of the virtual world and vehicles to create a seamless training environment.

The primary benefit of this system is that the student can see their own hands and legs in relation to the physical cab's driving controls, including the steering wheel, shifter, and pedals, which results in full control of "tactile" functionality. Seeing yourself superimposed into the virtual world also greatly enhances the general sense of immersion.



The Augmented reality Meta 3 VR headset can be used as a secondary immersive driving viewing system versus the large LED screens if desired to teach advanced spatial awareness. The VR kit's primary role will be to teach UTA policies and procedures with specified designed scenarios that are portrayed on the VR headset and the student responds to questions via the in-cab touchscreen. The touchscreen also will be utilized to track and show electric bus driver performance metrics.

Genesis Series 3-DOF Motion Package

Model # 4A-3DOF

Enhance your students driving experience with a full-motion cab. Sim-Tech incorporates D-Box 3 Degrees of Freedom (3-DOF) motion systems as an additional option to our simulators. According to customer feedback, this is the preferred (recommended) addition to any of our full-size simulators. This system will replace the standard seat "shaker" or motion seat. With the motion on the cab frame, we can give the driver better environment cues, like curb strikes, changes in terrain, the severity of accidents, and changes in road friction. It will also give you a better feel of braking, throttle, and cornering. You will feel the actual cab tilt when turning tight corners. Instead of just a seat moving, unlike the real world, the entire cab including dash assembly with the move. This way all the driver controls move with you like it would in the actual vehicle.

This system adapts to all our full-size simulators and can be put in a trailer or classroom environment. This is a 4-actuator system and will give the apparatus cab up to 3 degrees of freedom.

Specifications

- 4 Electric Screw Actuators
- Captive or Non-Captive Actuator Endings
- 3 Degree of Freedom Travel
- 1.5" total travel
 - 3/4" up & 3/4" down from centered position
- Simulates curb strikes, engine vibration, major and minor accidents, liquid movement, terrain feel.

D-BOX
Motion Architects™



D-BOX BENEFITS FOR VR EXPERIENCES

Studies conducted by independent university research labs concluded that:

- D-BOX significantly reduces cyber-sickness for virtual reality users
- D-BOX enhances memory, leading to better recall
- D-BOX users are more at ease when experiencing VR

Through high-fidelity motion technology, D-BOX can replicate reality and offer optimal training conditions by creating movements, vibrations and textures that are perfectly synchronized with on-screen visuals.

Positive impact on motion sickness¹

1. Motion sickness affects up to 18,6% of users when using static VR; **D-BOX drops this to 3,8%**
2. Immersing the body through vibro-kinetic experience stimulate the sense of touch which augments user's preference towards the experience
3. The activation of additional senses, which augment the perception of quality, pertinence and realism of a multimedia experience



Positive impact on memory capacities²

1. Users experience more positive emotions, greater arousal and more cognitive immersion, producing an **enhanced experience**
2. D-BOX usage mobilizes more areas of the brain (i.e. Frontal Cortex) which better anchors memories by tying current stimuli to passed experiences
3. Augmenting the emotional participation of the participant with a multiplier effect on emotions perceived
4. Coordination of senses creates better coherence in messages and movement
5. Memories are anchored in physical stimuli, leading to **reduced haptic dissonance** and more complete memories
6. Memories created with an associative network are encoded for long-term use, as this type of storage is dependant of the creation of a distributed cortical network



Positive impact on engagement³

1. D-BOX users are **44.7% more calm** when experiencing VR as opposed to static users
2. Usage of D-BOX combined with VR **show 59,95% more signs of comfort** than static users as shown by lower heart frequency



¹Gardé, A., Léger, P. M., Sénécal, S., Fredette, M., Labonté-Lemoyne, E., Courtemanche, F., & Ménard, J. F. (2018, April). The Effects of a Vibro-Kinetic Multi-Sensory Experience in Passive Seated Vehicular Movement in a Virtual Reality Context. In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (p. LBW091). ACM.

²Pauna, Horea, et al. "The effects of a high fidelity vibro-kinetic multisensory experience on implicit and explicit brand recognition." Journal of Neuroscience, Psychology, and Economics 12.1 (2019): 18.

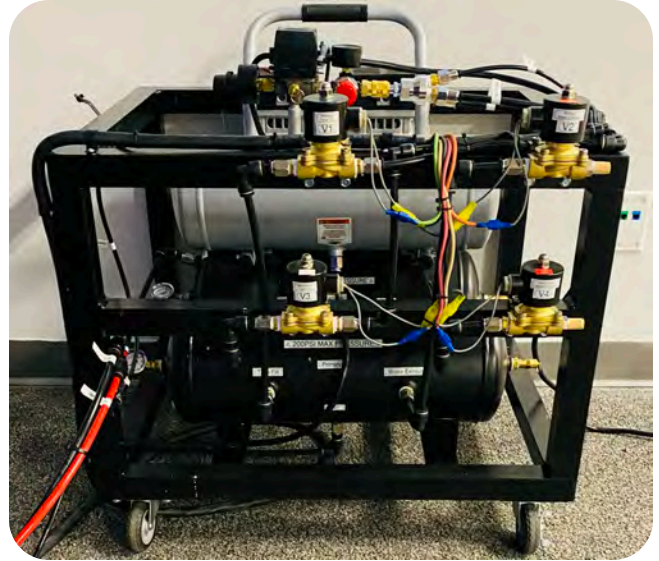
³Gardé, A., Léger, P. M., Sénécal, S., Fredette, M., Labonté-Lemoyne, E., Courtemanche, F., & Ménard, J. F. (2018, April). The Effects of a Vibro-Kinetic Multi-Sensory Experience in Passive Seated Vehicular Movement in a Virtual Reality Context. In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (p. LBW091). ACM.

Pneumatic Air System Package

Model# SL-AIRSYS-V1

The air system package includes:

- 125PSI Ultra quiet air compressor with incorporated air tank
- Air tank for primary air systems
- 12V Air solenoids for simulated air release when service brake is pressed
- 12V Air solenoids for filling tanks from the compressor
- Drain valves for draining moisture that builds up in the system
- Custom build aluminum frame with locking swivel casters to house all equipment
- Air-Ride seat
- Pneumatic Park protection valve with air release



Importance of Real Air

Sim-Tech incorporates as an option, real air systems for dynamic realism and effective training. Aside from the realistic feel of brakes, the system utilizes real air seat adjustment. Key items for discovery;

1. Air Brake valves that integrate as a real truck. Training for 3 point air brake loss enables brake check training per AAMVA and FMCSR guidelines to ascertain knowledge of proper air brake test and training.
2. Perform brake tests as in a real truck with real feel; test the ability and potential failure points of an air brake system in a realistic way through sounds, feel and gauge use.
3. Loss of air pressure can be as realistic as a truck in over-application of brakes causing brake failure The auditory sensation provides further acceptance to the trainee and reduces SAS.
4. Ability to cause audible brake loss enables trainees to identify and break down the cause of failure, to determine the possible cause of failures as associated with air systems.
5. Conduct a complete in-cab and engine start as outlined in the CDL Drivers manual all in our system.

TERMS AND CONDITIONS

1. A 2-year limited warranty covers all simulators.
 1. Extended warranties are available for up to a total warranty of 5+ years, including the 2-year standard warranty.
2. Prices do not include Federal, State, Local, or Use taxes, VAT, or foreign duties, if any, which are the purchaser's responsibility.
3. Proposal pricing is good for 90 days.
4. Delivery is FOB Destination.
5. Delivery within 180-220 days ARO, depending on options and quantity.
6. Payment Terms
 1. 50% Downpayment
 2. 50% Net 30 after delivery
7. All pricing is in US Dollars.
8. The product is fabricated and assembled in Sycamore, IL., USA.

Standard Omega Series™ Classroom / Facility Requirements

1. 3 - 20A 120V Quad Receptacle Outlet (Simulator & Computer) within 15ft of the simulator.
2. 1 - 15A 120V Quad Receptacle Outlet (Instructor Station) within 15ft of the instructor desk.
3. 10' x 12' clear footprint
 1. The actual simulator footprint is 94"W x 76"D. Additional air space around the simulator is needed for service and cooling.
4. The instructor's desk is large enough for all OPCON monitors and keyboard/mouse.