

## Professional Services Agreement

UTA Contract #23-03771

2023-2024 On-Board Survey

This Professional Services Agreement is entered into and made effective as of the date of last signature below (the “Effective Date”) by and between UTAH TRANSIT AUTHORITY, a public transit district organized under the laws of the State of Utah (“UTA”), and RESOURCE SYSTEMS GROUP, INC., a Vermont Corporation, with a place of business located at 55 Railroad Row, White River Junction, VT 05001 (“Contractor”).

### RECITALS

WHEREAS, UTA desires to hire professional services to conduct its 2023-2024 On-Board Survey per Title VI regulations (49 CFR Part 21).

WHEREAS, On 2023 August 21, UTA issued Request for Proposal Package Number 23-03771 (“RFP”) encouraging interested parties to submit proposals to perform the services described in the RFP.

WHEREAS, Upon evaluation of the proposals submitted in response to the RFP, UTA selected Contractor as the preferred entity with whom to negotiate a contract to perform the Work.

WHEREAS, Contractor is qualified and willing to perform the Work as set forth in the Scope of Services.

### 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. SERVICES TO BE PROVIDED

- a. Contractor shall perform all Work as set forth in the Scope of Services (Exhibit A). Except for items (if any) which this Contract specifically states will be UTA-provided, Contractor shall furnish all the labor, material and incidentals necessary for the Work.

- b. Contractor shall perform all Work under this Contract in a professional manner, using at least that standard of care, skill and judgment which can reasonably be expected from similarly situated professionals.
- c. All Work shall conform to generally accepted standards in the transit industry. Contractor shall perform all Work in compliance with applicable laws, regulations, rules, ordinances, permit constraints and other legal requirements including, without limitation, those related to safety and environmental protection.
- d. Contractor shall furnish only qualified personnel and materials necessary for the performance of the Work.
- e. When performing Work on UTA property, Contractor shall comply with all UTA work site rules including, without limitation, those related to safety and environmental protection.

2. **MANAGEMENT OF WORK**

- a. Contractor's Project Manager will be the day-to-day contact person for Contractor and will be responsible for all Work, as well as the coordination of such Work with UTA.
- b. UTA's Project Manager will be the day-to-day contact person for UTA, and shall act as the liaison between UTA and Contractor with respect to the Work. UTA's Project Manager shall also coordinate any design reviews, approvals or other direction required from UTA with respect to the Work.

3. **PROGRESS OF WORK**

- a. Contractor shall prosecute the Work in a diligent and continuous manner and in accordance with all applicable notice to proceed, critical path schedule and guaranteed completion date requirements set forth in (or developed and agreed by the parties in accordance with) the Scope of Services.
- b. Contractor shall conduct regular meetings to update UTA's Project Manager regarding the progress of the Work including, but not limited to, any unusual conditions or critical path schedule items that could affect or delay the Work. Such meetings shall be held at intervals mutually agreed to between the parties.
- c. Contractor shall deliver monthly progress reports and provide all Contract submittals and other deliverables as specified in the Scope of Services.
- d. Any drawing or other submittal reviews to be performed by UTA in accordance with the Scope of Services are for the sole benefit of UTA, and shall not relieve Contractor of its responsibility to comply with the Contract requirements.

- e. UTA will have the right to inspect, monitor and review any Work performed by Contractor hereunder as deemed necessary by UTA to verify that such Work conforms to the Contract requirements. Any such inspection, monitoring and review performed by UTA is for the sole benefit of UTA, and shall not relieve Contractor of its responsibility to comply with the Contract requirements.
- f. UTA shall have the right to reject Work which fails to conform to the requirements of this Contract. Upon receipt of notice of rejection from UTA, Contractor shall (at its sole expense and without entitlement to equitable schedule relief) promptly re-perform, replace or re-execute the Work so as to conform to the Contract requirements.
- g. If Contractor fails to promptly remedy rejected Work as provided in Section 4.6, UTA may (without limiting or waiving any rights or remedies it may have) perform necessary corrective action using other Contractor s or UTA's own forces. Any costs reasonably incurred by UTA in such corrective action shall be chargeable to Contractor .

#### 4. **PERIOD OF PERFORMANCE**

This Contract shall commence as of the Effective Date. This Contract shall remain in full force and effect until all Work is completed in accordance with this Contract, as reasonably determined by UTA. Contractor shall complete all Work no later than 2024 December 31. This guaranteed completion date may be extended if Contractor and UTA mutually agree to an extension evidenced by a written Change Order. The rights and obligations of UTA and Contractor under this Contract shall at all times be subject to and conditioned upon the provisions of this Contract.

#### 5. **COMPENSATION**

- a. For the performance of the Work, UTA shall pay Contractor in accordance with the payments provisions described in Exhibit B. Payments shall be made in accordance with the milestones or other payment provisions detailed in Exhibit B. If Exhibit B does not specify any milestones or other payment provisions, then payment shall be made upon completion of all Work and final acceptance thereof by UTA.
- b. To the extent that Exhibit B or another provision of this Contract calls for any portion of the consideration to be paid on a cost-reimbursement basis, such costs shall only be reimbursable to the extent allowed under 2 CFR Part 200 Subpart E. Compliance with federal cost principles shall apply regardless of funding source for this Contract.
- c. To the extent that Exhibit B or another provision of this Contract calls for any portion of the consideration to be paid on a time and materials or labor hour basis, then Contractor must refer to the not-to-exceed amount, maximum Contract amount, Contract budget amount or similar designation (any of these generically referred to as the "Not to Exceed Amount") specified in Exhibit B (as applicable). Unless and until UTA has notified Contractor by written instrument designated or indicated to be a Change Order that the Not to Exceed Amount has been increased (which notice shall specify a revised Not to Exceed Amount): (i) Contractor shall not be obligated to perform services or incur costs

which would cause its total compensation under this Contract to exceed the Not to Exceed Amount; and (ii) UTA shall not be obligated to make payments which would cause the total compensation paid to Contractor to exceed the Not to Exceed Amount.

- d. UTA may withhold and/or offset from payment any amounts reasonably reflecting: (i) items of Work that have been rejected by UTA in accordance with this Contract; (ii) invoiced items that are not payable under this Contract; or (iii) amounts Contractor owes to UTA under this Contract.

6. **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 Professional Services Supply Agreement (including any exhibits and attachments hereto).
- 2. 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 Professional Services;
- 3. Contractor's Proposal including, without limitation, all federal certifications (as applicable).

- b. The above-referenced documents are made as fully a part of the Contract as if hereto.

7. **ORDER OF PRECEDENCE**

The Order of Precedence for this contract is as follows:

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

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

8. **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) Contractor '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 Contractor 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 Contractor to proceed pending negotiation of a Change Order. Any changes to this Contract undertaken by Contractor without such written authority shall be at Contractor 's sole risk. Contractor shall not be entitled to rely on any other manner or method of direction.
- c. Contractor 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 Contractor based on the information included in (or referenced by) this Contract. In order to be eligible for equitable relief for "constructive" changes in Work, Contractor must give UTA's Project Manager or designee written notice stating:
  - A. The date, circumstances, and source of the change; and
  - B. That Contractor regards the identified item as a change in Work giving rise to an adjustment in this Contract.

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

- d. As soon as practicable, but in no event longer than 30 days after providing notice, Contractor 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 Contractor 's entitlement to an equitable adjustment (or the extent of any such equitable adjustment) shall be resolved in accordance with Article 21 of this Contract.

9. **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](mailto: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](mailto:ap@rideuta.com). Invoice not submitted electronically will be paid thirty (30) calendar days from the 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](mailto:ap@rideuta.com).

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 Professional 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 Contractor s, agent, officers, directors, employees, joint owners, affiliates and contractors.

11. **USE OF SUBCONTRACTORS**

- a. Contractor shall give advance written notification to UTA of any proposed subcontract (not indicated in Contractor'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. Contractor shall be solely responsible for making payments to subContractors, and such payments shall be made within thirty (30) days after Contractor receives corresponding payments from UTA.
- d. Contractor shall be responsible for and direct all Work performed by subContractors.
- e. Contractor agrees that no subcontracts shall provide for payment on a cost-plus-percentage-of-cost basis. Contractor further agrees that all subcontracts shall comply with all applicable laws.

12. **KEY PERSONNEL**

Contractor shall provide the key personnel as indicated in Contractor's Proposal (or other applicable provisions of this Contract), and shall not change any of said key personnel without the express written consent of UTA. The following individuals are considered to be key personnel under this contract.

Florian Fessel – Project Manager  
Margaret Campbell – Sr Technical Advisor

If Contractor changed key personnel without the express written permission of UTA, it shall be in default of the contract and liable for default damages .

13. **SUSPENSION OF WORK**

- a. UTA may, at any time, by written order to Contractor, require Contractor 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, Contractor 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, Contractor 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 Contractor 's cost or time to perform the Work, UTA's Project Manager or designee shall make an equitable adjustment to compensate Contractor for the additional costs or time, and modify this Contract by Change Order.

14. **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 subContractor s 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 Professional Services using other Contractor s 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.

**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 Professional Services furnished by Contractor prior to termination.

15. **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 this 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 this Contract and/or Contractor 's compliance with this Contract. Records shall be retained by Contractor for a period of at least six (6) years after completion of the Work, 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 subContractor s utilized in the performance of the Work at any tier.

16. **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:
  - A. Information already in the public domain.
  - B. Information disclosed to Contractor by a third party who is not under a confidentiality obligation.
  - C. Information developed by or in the custody of Contractor before entering into this Contract.
  - D. Information developed by Contractor through its work with other clients; and
  - E. Information required to be disclosed by law or regulation including, but not limited to, subpoena, court order or administrative order.

17. **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.

18. **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 Indemnitee, 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.

19. **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, its 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".
- b. The policy must also contain the following endorsement, WHICH MUST BE STATED ON THE CERTIFICATE OF INSURANCE: "Contractual Liability Railroads" ISO from CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Utah Transit Authority Property" as the Designated Job Site

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 \$1,000,000  
 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, AND when such Contractor or subContractor executes the appropriate waiver form.

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 Contractor . Insurance limits indicated in this agreement are minimum

limits. Larger limits may be indicated after the Contractor'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.
  3. Contractor and their insurers shall endorse the required insurance policy(ies) to waive their right of subrogation against UTA. Contractor's insurance shall be primary with respect to any insurance carried by UTA. Contractor will furnish UTA at least thirty (30) days advance written notice of any cancellation or non-renewal of any required coverage that is not replaced.
- 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](mailto: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](mailto: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: Contractor's 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 Office of General Counsel, whose decision shall be final. Such action will not require a formal Contract amendment, but may be made by administrative action.

20. **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 this 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 portion of the Work is in such suit held to constitute such an infringement or an injunction is filed that interferes with UTA's rights under this Contract, Contractor shall, at its expense and through mutual agreement between the UTA and Contractor, either procure for UTA any necessary intellectual property rights, or modify Contractor's services or deliverables 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 or upon the Work or the property on which the Work is located on account of any labor performed or labor, services, and equipment furnished by subContractors of any tier; and (ii) keep the Work and said property free and clear of all liens or claims arising from the performance of any Work covered by this Contract by Contractor or its subContractors of any tier. If any lien arising out of this Contract is filed, before or after Work is completed, 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.

21. **INDEPENDENT CONTRACTOR**

Contract is an independent contractor and agrees that its personnel will not represent themselves as, nor claim to be, an officer or employee of UTA by reason of this Contract. Contractor is responsible to provide and pay the cost of all its employees' benefits.

22. **PROHIBITED INTEREST**

No member, officer, agent, or employee of UTA during his or her tenure or for one year thereafter shall have any interest, direct or indirect, including prospective employment by Contractor in this Contract or the proceeds thereof without specific written authorization by UTA.

23. **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 6. 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:

<b>Level of Authority</b>	<b>Time Limit</b>
UTA's Project Manager/Contractor's Project Manager	Five calendar days
UTA's Director of Planning/Contractor's Senior Director	Five calendar days
UTA's Chief, Planning & Engagement/Contractor's CEO	Five calendar days

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.

24. **GOVERNING LAW**

This Contract shall be interpreted in accordance with the substantive and procedural laws of the State of Utah. Any litigation between the parties arising out of or relating to this Contract will be conducted exclusively in federal or state courts in the State of Utah and Contractor consents to the jurisdiction of such courts.

25. **ASSIGNMENT OF CONTRACT**

Contractor shall not assign, sublet, sell, transfer, or otherwise dispose of any interest in this Contract without prior written approval of UTA, and any attempted transfer in violation of this restriction shall be void.

26. **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.

27. **NOTICES OR DEMANDS**

- a. Any formal notice or demand to be given by one party to the other shall be given in writing by one of the following methods: (i) hand delivered; (ii) deposited in the mail, properly stamped with the required postage; (iii) sent via registered or certified mail; or (iv) sent via recognized overnight courier service. All such notices shall be addressed as follows:

If to UTA:  
Utah Transit Authority  
ATTN: Jimi Rider  
669 West 200 South  
Salt Lake City, UT 84101

with a required copy to:  
Utah Transit Authority  
ATTN: Legal Counsel  
669 West 200 South  
Salt Lake City, UT 84101

If to Contractor :  
Resource Systems Group, Inc.  
ATTN: Margaret Campbell  
55 Railroad Row  
White River Junction, VT 05001

- b. 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. Either party may change the address at which such party desires to receive written notice by providing written notice of such change to any other party.

- c. Notwithstanding Section 27, the parties may, through mutual agreement, develop alternative communication protocols to address change notices, requests for information and similar categories of communications. Communications provided pursuant to such agreed means shall be recognized as valid notices under this Contract.

28. **CONTRACT ADMINISTRATOR**

UTA's Contract Administrator for this Contract is Jimi Rider, or designee. All questions and correspondence relating to the contractual aspects of this Contract should be directed to said Contract Administrator, or designee.

29. **INSURANCE COVERAGE REQUIREMENTS FOR CONTRACTOR EMPLOYEES AND SUBCONTRACTORS UNDER DESIGN AND CONSTRUCTION CONTRACTS**

- a. The following requirements apply to the extent that the Contractor is providing design or constructin services and (i) the initial value of this Contract is equal to or in excess of \$2 million; (ii) this Contract, with subsequent modifications, is reasonably anticipated to equal or exceed \$2 million; (iii) Contractor has a subcontract at any tier that involves a sub-contractor that has an initial subcontract equal to or in excess of \$1 million; or (iv) any subcontract, with subsequent modifications, is reasonably anticipated to equal or exceed \$1 million.
- b. Contractor shall, prior to the effective date of this Contract, demonstrate to UTA that Contractor has and will maintain an offer of qualified health insurance coverage (as defined by Utah Code Ann. § 17B-2a-818.5) for the Contractor's employees and the employee's dependents during the duration of this Contract.
- c. Contractor shall also demonstrate to UTA that subContractor s meeting the above-described subcontract value threshold have and will maintain an offer of qualified health insurance coverage (as defined by Utah Code Ann. § 17B-2a-818.5 for the subContractor 's employees and the employee's dependents during the duration of the subcontract.

30. **COSTS AND ATTORNEY'S 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

31. **NO THIRD PARTY BENEFICIARY**

The parties enter in to this 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 this Contract.

32. **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.

33. **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.

34. **TRAVEL COSTS**

Any travel costs charged against this contract and paid for with contract funds must be in compliance with UTA's Travel Policy (UTA .02.XX) and the U.S. General Services Administration (GSA) per diem rates.

35. **SEVERABILITY**

Any provision of this 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 this Contract.

36. **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. The terms of the Contract supersede any additional or conflicting terms or provisions that may be preprinted on Vendor's work plans, cost estimate forms, receiving tickets, invoices, or any other related standard forms or documents of Vendor that may subsequently be used to implement, record, or invoice Goods and/or Services hereunder from time to time, even if such standard forms or documents have been signed or initialed by a representative of UTA. The terms of the Contract prevail in any dispute between the terms of the Contract and the terms printed on any such standard forms or documents, and such standard forms or documents will not be considered written amendments of the Contract.

37. **AMENDMENTS**

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

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. **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 5, 7, 8, 10, 14, 15, 17, 18, 19, 20, 23, 29 and 30.

*[Remainder of this page left intentionally blank. Additional page(s) follow.]*

IN WITNESS WHEREOF, the parties have made and executed this Contract as of the day, month and year of the last signature contained below.

**UTAH TRANSIT AUTHORITY:**

**RESOURCE SYSTEMS GROUP, INC.:**

By \_\_\_\_\_ Date:

DocuSigned by:  
By  Date: 11/21/2023  
DDCEE3FB6A3A4D8...

Jay Fox  
UTA Executive Director

Robert Hewett  
Contracts Manager

By \_\_\_\_\_ Date:

Nichol Bourdeaux  
Chief, Planning & Engagement

Approved as to Content & Form

DocuSigned by:  
By  Date: 11/22/2023  
70E33A415BA44F6...

Mike Bell  
UTA Legal Counsel

Reviewed & Recommended

By \_\_\_\_\_ Date:

Dede Murray  
Planning Project Manager

*UTA Contract No. 23-03771  
2023-2024 On-Board Survey*

## Exhibit A

### Project Scope of Work

#### PROJECT TASKS

##### Task 1: Project Administration

Contractor shall present to UTA a project administration strategy that includes, but is not limited to:

- A schedule including milestones, meetings, and deliverables including a kick-off meeting with project stakeholders, and
- Identification of a Project Management team and, if necessary, an external Technical Advisory Committee (UTA Project Manager will identify an internal Technical Advisory Committee as identified in Task 4).

**Deliverable:** A project schedule including planned project meetings, Project Management team committee members.

##### Task 2: Review Existing Data Sources and Surveys

- Contractor shall review 2019 on-to-off and OD survey materials and data sets, and identify how the data were used; as well as identify whether the questionnaire, sampling plan, and other aspects of the survey methodology are applicable and can be replicated for this effort, and
- Contractor shall provide a summary document outlining best practices and recommendations for improvements to the previous methodology to be used as input during questionnaire and sampling plan development.

**Deliverable:** Summary report of findings from the UTA 2019 Survey to guide the 2023-2024 Survey.

##### Task 3: Develop Sampling Plan and Survey Approach

UTA operates buses and trains running on approximately 86 routes, seven (7) days a week, from approximately 3:30 a.m. until nearly midnight on select routes. The objective of the survey effort is to collect a population-proportional sample to understand rider demographics, fare usage data, and route-level origins and destinations from the entire UTA service area. It is important to understand differences in survey responses across travel markets, especially identifying those respondents traveling to or from significant attractors including, but not limited to, such locations as downtown Salt Lake City, major university campuses and hospitals, and other community resources such as large retail destinations; as well as, traveling to or from traditionally low-wage employment regions. Contractor's sampling plan shall:

- Target respondents from across the system traveling on bus, light rail, FrontRunner routes, and on UTA On-Demand services, at all times of the day,

- Identify and target major travel markets, geographical areas, and traditionally low-wage employment regions, and
- Identify peak period vs. off-peak period respondents, and weekend travelers. Inclusion of weekend surveying is required for UTA planning purposes.

Contractor's sampling plan and survey approach shall include the following:

- A survey with a goal of producing a statistically valid sample of all UTA bus, light rail, and FrontRunner routes by service and time of day; as well as UTA On-Demand service.
- The surveys will need to be administered on the entire UTA System between February and June 2024. Care will need to be taken to collect samples only during typical travel times and to ensure that college is in session; notably, excluding surveying on holidays.
- This will be a system-wide survey of UTA services excluding Paratransit services and vanpools.

**Deliverable:** Complete survey sampling plan and methodology, including estimated target response rates.

*Task 4: Develop Questionnaire*

Working with an internal UTA Technical Advisory Committee, Contractor shall develop a survey questionnaire for the survey, considering information collected in Task 2.

Key data that should be gathered via the on-board survey includes, but is not limited to:

- Home Address or nearest intersection – should include ZIP+4,
- Trip destination,
- Access to and egress from transit – how did you get to/from transit (e.g. walk, bike, park-and-ride, wheelchair),
- Time of day when you use transit,
- Race/ethnicity,
- Gender,
- Age,
- Education,
- Language spoken at home,
- Disability, disability type,
- Household Income,
- Household size,
- Number of vehicles in household,
- Number of licensed drivers in household,
- Method of fare payment,
- Reason for use of transit for journey, and
- Cellular phone/smart phone availability.

Value statements or stated preference questions may also be considered as part of the survey. Survey questionnaire shall be available in English and Spanish, at a minimum.

**Deliverable:** Final on-board questionnaire form that corresponds with the methodology(s) developed in Task 3.

**Task 5: Program Survey and Produce Survey Materials**

Once the questionnaire has been completed, Contractor shall develop the on-board survey program and materials. This will be dependent on survey details identified in Task 2 and Task 3. A survey instrument that allows for digital input, via tablet or other e-device, is preferred due to data and location tracking; as well as the potential for visibility by respondents in a variety of languages. Contractor shall describe the tools used to ensure respondents with Limited English Proficiency (LEP) are able to access the survey information, including number of languages available.

**Deliverable:** Final survey program and required materials.

**Task 6: Administration of Survey**

Contractor shall closely manage project oversight, including validation of the execution of the program and adjusting for unforeseen disruptions in the overall survey that may introduce bias or corrupt the survey results. As indicated in Task 5, electronic delivery of survey is preferred.

The full system survey will begin in February and must be completed by the end of June 2024.

**Deliverable:** Summary report of the results of the survey execution, including problems and implemented solutions to address problems.

**Task 7: Analyze Survey Results**

Contractor shall produce a comprehensive final data set, including tabulations and cross-tabulations of data in anticipation of the expectations for the use of the data (summarized in the “Objectives” section of this Contract’s corresponding solicitation). Contractor shall “scrub” or validate the data for accuracy and consistency and expand upon and weigh the data to ensure an accurate system-wide picture is captured. Delivery of data set(s) will need to be coordinated with UTA Technical Advisory Committee to ensure data can be integrated and accessed on UTA systems and is compatible with previous On-Board Survey data.

**Deliverable:** Final data set(s) in Microsoft Excel format. Any GIS data produced should also be provided.

**Task 8: Draft Document of Survey Results**

**Deliverable:** Draft summary report, including an “Executive Summary.” This will be reviewed and redlined by internal UTA Technical Advisory Committee prior to Task 9.

**Task 9: Final Document of Survey Results**

**Deliverable:** Final summary report incorporating the redlines made on the draft summary report by the internal UTA Technical Advisory Committee, including an Executive Summary and a PowerPoint presentation to UTA staff of survey results.

### ANTICIPATED PROJECT SCHEDULE\*

Task	2023			2024								
	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov
Project kick-off	█											
Project Administration	█	█	█	█	█	█	█	█	█	█	█	█
Review Existing Data Sources and Surveys	█	█										
Develop Sampling Plan and Survey Approach		█	█									
Develop Questionnaire		█	█									
Program Survey and Produce Survey Materials		█	█									
Administration of Survey			█	█	█	█	█					
Analyze Survey Results							█	█	█	█		
Draft Document of Survey Results											█	
Final Document of Survey Results												█

\*subject to change

## Exhibit B

### Project Pricing

Tasks		Total Hours	Cost
Task 1:	Project Administration	160	\$27,612
Task 2:	Review Existing Data Sources and Surveys	34	\$6,056
Task 3:	Develop Sampling Plans and Survey Approach	192	\$31,047
Task 4:	Develop OD Questionnaire	100	\$16,837
Task 5:	Program and produce survey materials	109	\$20,245
Task 6:	Administration of Survey	1,814	\$183,065
Task 7:	Analyze Survey Results	747	\$90,794
Task 8:	Draft Documents of Survey Results	252	\$36,324
Task 9:	Final Document of Survey Results	88	\$11,899
<b>Totals</b>		<b>3,496</b>	<b>\$423,879</b>

Expenses	Cost
Data entry	\$0
Survey temporary staff	\$0
<b>Total Expenses</b>	<b>\$0</b>

Subcontractor Expenses	Cost
Travel for fieldwork	\$49,168
Survey temporary staff	\$201,952
<b>Total Subcontractor</b>	<b>\$251,120</b>

<b>Total Project Cost</b>	<b>\$674,998</b>
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Pricing of this Contract, as specified in the table above, shall be firm-fixed through the entirety of the period of performance. The Total Project Cost shall be an aggregate, fixed Lump Sum.

Contractor shall invoice UTA on a milestone basis. Milestones, as identified in the table above, will be defined as each Task (1 through 9), respectively. Associated Deliverables with each Task are specified in Exhibit A – Project Scope of Work. Upon submission of each completed deliverable, UTA Project Manager shall assess for accuracy and satisfactory completion prior to Invoice submission.

# 1.0 TECHNICAL PROPOSAL

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## 1.1 PROJECT APPROACH

### Project Understanding

UTA has expanded its services substantially over the past 15 years. With the expansion of services, it is important to understand the change in travel patterns. Understanding travel patterns with an origin-destination (O-D) survey helps agencies determine how to better tailor service to meet the needs of its riders and provides a foundation to forecast future travel behavior for new or expanded services.

Many of UTA's new and expanded services were completed by the time of the last survey in 2019. Since then, those services have become more established. Additionally, the COVID-19 pandemic upended traditional travel patterns and significantly impacted transit ridership globally. Therefore, it is important for UTA to conduct O-D surveys to understand how these changes ultimately affect services system-wide.

In addition to understanding travel behavior, UTA needs to obtain demographic profiles for its riders for Title VI reporting and fare equity analysis requirements. RSG is well versed in the questions that are required for Title VI and will ensure UTA has included the appropriate questions in its survey.

Continuing to team with ETC Institute, as we did for the 2019, 2015, and 2013 O-D studies, we are poised to harness the knowledge and experience gained from these prior programs, and we are well positioned to provide UTA with a consistent and efficient 2023-2024 On-Board Survey.

Our team brings unparalleled experience and knowledge in conducting on-board O-D studies and works closely with the FTA. The team authored many of the best practice methods currently in place, such as tablet surveying, on-to-off surveying, sampling targets, and survey weighting/expansion methods.

Finally, our team is in the unique position of offering both best practice survey methods, but also being an end user of O-D data for UTA's Simplified Trips-on-Project (STOPS) ridership forecasting tool. Over the past year, we have worked with UTA to update and calibrate the STOPS model and provide ridership forecasts for several BRT corridors and FrontRunner projects. During this process, we have included updates to represent UTA's On Demand service in the model, among other improvements.

### Proposed Approach

#### Task 1: Project Administration

The RSG team will efficiently deliver study results by leveraging our experience on the prior UTA O-Ds. At the outset of the project, RSG's Project Manager will create a project schedule that includes milestones and key deliverables. We will work with UTA to identify a Project Management Team, who will be kept up to date on project status and will be included in key project decisions.

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We will hold a kickoff meeting with project stakeholders to review objectives and goals for the study. After the kickoff, the RSG team recommends holding biweekly calls, particularly during the planning stages of the study, to ensure all key stakeholders are informed of progress and to discuss project needs and challenges.

Finally, after the kickoff meeting, RSG will create a project work plan that outlines the project objectives, key tasks to accomplish, and any data needs required from UTA to successfully complete the project.

### TASK 1 DELIVERABLE

- Project schedule and work plan, including identifying Project Management Team Committee members

### Task 2: Review Existing Data Sources and Surveys

The prior UTA On-Board Studies obtained system-wide O-D information. We envision the O-D questionnaire being similar to those of past years. We expect many of the methodologies, including the sampling plan and survey distribution methods will remain similar to 2019 but we will revisit each step to identify what aspects of the past survey efforts to replicate and which to update. Because these materials and methodologies were designed and implemented by the RSG team, this review will be accelerated and will help guarantee a comprehensive understanding of the previous effort.

Similar to the 2019 study, we expect that the 2023-2024 study will include both an on-to-off and onboard tablet-based surveying. Both of these components are considered critical to a successful onboard O-D study:



Onboard tablet surveys provide higher quality data with no missing information

- The on-to-off survey provides invaluable information about boarding and alighting *pairs* on larger bus routes and on the rail that allows for a more detailed survey weighting process that better represents the system. This is important because short trips can be underrepresented in O-D surveys because the rider may not have time to complete the survey before alighting. An on-to-off survey provides data to correct this bias.
- Onboard tablet surveys provide higher quality data with no missing information on the surveys. All locations are geocoded in real-time and reviewed by the surveyor with the rider while taking the survey. This allows for immediate corrections if a rider misunderstood a question. All questions can be required to be answered and therefore respondents cannot skip over address questions or provide only partial information. A large portion of paper surveys typically need to be discarded due to missing or incomplete information that results in a survey being unusable for most applications.

A summary report of the findings associated with the 2019 survey methodology will be provided for reference in the development of the 2023-2024 methodology and instrument. We will consult with the FTA and RSG modelers using these data, regarding current best practices to understand where improvements can be made to the questionnaire, sampling, or other methodologies within the study timeline and budget. One such recent example of this type of learning has been about improved weighting and expansion processes to ensure the best

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possible representation of trips for use in ridership forecasting tools such as regional models and STOPS models. Data collection efforts that reflect FTA’s best practices and the ridership forecasts that rely on these data tend to be more well received by FTA when applying Capital Investment Grant programs.

## TASK 2 DELIVERABLE

- Summary report of findings from 2019 O-D survey process to guide the 2023-2024 Survey

### Task 3: Develop Sampling Plan and Survey Approach

RSG will create a sampling plan and survey approach that supports the study objectives and can be completed within UTA’s budget and timeline.



RSG offers the experience of improved sampling and weighting techniques for O-D studies

#### Weekday

FTA best practices include conducting both an on/off survey and a full O-D survey. It is typically recommended that about 10% of boardings be surveyed for the O-D survey and about 20% of average weekday boardings for routes with over 2,500 average weekday riders for the on-to-off survey. We have budgeted for up to 11,000 completed weekday O-D surveys which should provide a 10% sample of average weekday ridership across the system<sup>1</sup>. We have also assumed that the on-to-off survey will be conducted on the FrontRunner, TRAX, and the four bus routes with ridership greater than 2,500 riders; smaller routes gain less value from the on-to-off survey during the weighting process due to smaller sample sizes. We recommend that once the sampling plan and approach are developed, that UTA and the RSG team discuss the approach with the FTA. This step is critical in helping the FTA feel comfortable with the data being collected and with subsequent models based on these data.

The surveys will be conducted on UTA’s full system of fixed-route buses and trains between January and June 2024. We recommend surveying on Mondays through Thursdays and will focus on trips occurring between 6:00 a.m. and 9:00 p.m., consistent with the prior studies. While some routes do run later than 9:00 p.m., ridership declines significantly making surveying less efficient and more costly. Therefore, we do not recommend surveying beyond 9:00 p.m. but will discuss with UTA once the project is underway and potentially reduce surveying in other areas if late night surveying is a priority.

The sampling plan will aim to collect surveys roughly proportional to actual ridership by route/line, time of day, and direction. The RSG team will avoid surveying during holidays or during weeks that the universities are out of session. At the outset of the project, we will work with UTA to determine a list of “blackout” days in which surveying will not be conducted.

#### Weekend

The weekend sampling plan will aim to collect a 2% sample of average Saturday and Sunday riders, resulting in about 1,200 Saturday surveys and 500 Sunday Origin-Destination (OD) surveys. Because these surveys will be used for planning but not in modeling applications, we do not recommend an on-to-off survey for the weekend.

<sup>1</sup> Based on January-May, 2023 average ridership data

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## On Demand

The On Demand sampling plan will require close coordination with UTA to determine the best approach and number of surveys. Our team understands the importance of conducting some of the surveys on-board, per the Response to RFP Questions. Therefore, we have budgeted to conduct 50 surveys onboard these vehicles and will work with UTA to determine if additional surveys should be obtained through email or app notification invitations, postcard seat drops, or other means.

### TASK 3 DELIVERABLE

- Complete on-to-off and O-D survey sampling plan and methodology, including estimated target response rates

## Task 4: Develop Questionnaire

RSG will collaborate with the UTA Technical Advisory Committee (TAC) to develop a questionnaire while addressing the most critical goals of the study. The draft questionnaire will be then distributed to the TAC for final approval prior to programming. The questionnaire will likely include the following questions:

- Route surveyed on
- Direction of travel
- Any other transit routes used and number of transfers
- Time of trip
- Origin location and type
- Boarding location
- Alighting location
- Destination location and type
- Access and egress modes
- Gender
- Age
- Household income
- Race and Ethnicity
- Household size
- Number of vehicles in household
- Number of licensed drivers in household
- Method of fare payment
- Reason for use of transit for journey
- English proficiency
- Language spoken at home
- Disability status
- Cellular phone/smart phone availability
- Home address or nearest intersection

The RFP states that values statements or stated preference questions may be considered for part of the survey; however, the RSG team recommends keeping the survey concise and focused primarily on the O-D questions to ensure a high response rate to satisfy the main objective of this study—understanding origin and destination behavior. However, RSG is well versed in conducting stated preference surveys and would be happy to talk with UTA about additional scope and budget to do so as a follow on to this study.

### TASK 4 DELIVERABLE

- Final on-board questionnaire that corresponds with the methods developed in Task 3

## Task 5: Program Survey and Produce Survey Materials

Once the questionnaire content is finalized, ETC Institute will program the tablet-based survey to be used on-board UTA's buses and trains. The survey will include an address geocoder that will provide a latitude/longitude for each location in real-time. This improves the quality of the final data set as well as improves data processing efficiencies.

For riders with Limited English Proficiency (LEP), our team has several options to allow them to participate in the survey: 1) taking a paper survey in their language of choice, 2) taking the survey online in their language of choice, or 3) taking the survey via phone interview at a later date or time. Typically, we have offered the UTA survey in English and Spanish and have assumed the same for this effort.

ETC Institute will also program/prepare the on-to-off survey tools and materials. The on-to-off survey consists of a small card with a barcode on it and a barcode scanning system that links the scan to the time and location where a barcode was scanned.

FIGURE 1. ON-TO-OFF BARCODE AND SCANNER



### TASK 5 DELIVERABLE

- Final survey program and materials

## Task 6: Administration of Survey

### On-to-Off Survey

ETC Institute will administer the on-to-off survey according to the sampling plan developed in Task 3. The data will then be processed, resulting in a dataset that includes the route surveyed, direction, respondent boarding time, boarding station/stop, and alighting station/stop.

### O-D Survey

ETC Institute will administer the O-D survey according to the sampling plan developed in Task 3, using a tablet-based surveying approach.

**Surveyor Training.** Prior to the start of the field, we will conduct in-person group training on survey procedures and safety with all survey staff. A training manual will also be included.

**Timing of the Survey.** The surveys will be administered weekdays (Monday-Thursday) when schools are in session and will avoid holidays and major school closures in the area. The surveys will be administered from 6:00am-9:00pm or during the hours for which the route is operating.

**During the Administration of the Survey.** Interviewers will select riders at random to participate in the survey based on the sampling goals established for each route.

**After the Administration of the Survey.** After the surveys are administered, the team will review each survey record to ensure that all necessary information has been provided.

### TASK 6 DELIVERABLE

- Summary report of the results of the survey execution, including problems and implemented solutions to address problems

## Task 7: Analyze Survey Results

All data will automatically be coded and geocoded in real-time with the tablet-based survey. Much of the data will be cleaned in real-time as well, with interviewers double checking whether a respondent's trip makes sense while they take the survey. Additionally, RSG and ETC will undertake a data cleaning and validation effort after data collection to ensure a high quality dataset for UTA. This cleaning will include a visual inspection of each record to be sure it makes sense.

Prior to analysis, RSG will weight and expand the survey records to represent UTA ridership. RSG will weight to the on-to-off survey for lines/routes where it is conducted and for routes where it is not conducted, we will assume the boarding and alighting patterns to be correct from the survey and will expand to automatic passenger counter (APC) data provided by UTA by route/line, direction, and time-period.

RSG will analyze the data using tabulations and cross tabulations for each question and will primarily be composed of tabulations and charts, as well as cross tabulations by route/line, peak vs. off-peak, ticket type, rider frequency, and other key variables. An example of one analysis is shown in Figure 2. Example of Map of Origins, which maps origin locations from RSG's 2013 report to UTA.

FIGURE 2. EXAMPLE OF MAP OF ORIGINS

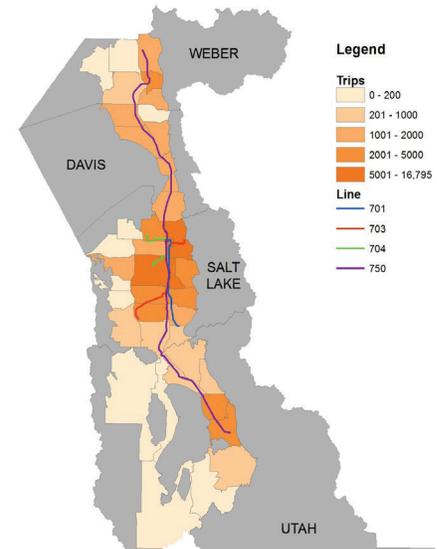
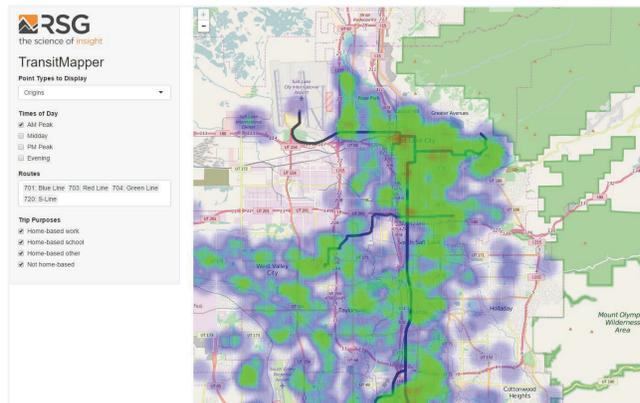


FIGURE 3. EXAMPLE OF TRANSIT MAPPER TOOL



### Transit Mapper Tool

RSG has developed a web-based tool, called Transit Mapper, that we will provide to UTA as part of this study. The RSG team will develop this application so that UTA can easily view the O-D patterns dynamically (Figure 3. Example of Transit Mapper Tool). This tool will allow UTA to map the O-D data based on selecting several different variables to explore the data in a web browser.

## TASK 7 DELIVERABLE

- Final dataset(s) in Microsoft Excel format, including any GIS data such as latitude/longitudes, Transportation Analysis Zones (TAZs), and maps

## Task 8: Draft Document of Survey Results

The report will document all survey review, design, implementation, and analysis information outlined in Tasks 1 to 7. The report will contain figures and graphs of key analyses and provide

2023-2024 On-Board Survey RFP No. 23-03771

an executive summary highlighting the key findings. RSG will work with the TAC to create a draft report that covers all materials.

#### TASK 8 DELIVERABLE

- Draft summary report

#### **Task 9: Final Document of Survey Results**

A final report addressing the Committee's comments on the draft report will be submitted. Additionally, an executive summary of the survey report and a final presentation in PowerPoint will be created to highlight the key findings of the study.

#### TASK 9 DELIVERABLE

- Final summary report