EXHIBIT A

RFP SPECIFICATIONS

12324P Onboard Integrated Technology System

Sections That Have Been Removed from Specifications

Section VIII. Required Forms, Pages 44-49. These are included in the Proposer's Response.
Section IX. Sample Contract, Pages 50-91.

City of Yakima
NOTICE TO PROPOSERS
RFP NO. 12324P

Notice is hereby given by the undersigned that electronic sealed Requests for Proposals will be accepted via PublicPurchase.com until the hour of 2:00:00 PM PST on September 7, 2023 RFPs will be publicly opened in Yakima City Hall, Council Chambers, 129 N. 2nd Street, Yakima, Washington 98901. At such time, Proposers names will be publicly read for: **Onboard Integrated Technology System for Yakima Transit**

Instructions to register with PublicPurchase.com are available at www.yakimawa.gov/services/purchasing.

A pre-proposal conference will be held at 1:30 p.m. on August 10, 2023 in the Public Works Large Conference Room, located at the Public Works Facility. Check in at the Kary Annex, 2301 Fruitvale Blvd., Yakima, WA 98902 for directions to the conference Room. Attendance is not mandatory; however, Proposers are STRONGLY urged to attend. If potential proposers wish to call in on a conference line, call Gregory Story, Transit Assistant Manager at 509-576-6422 for instructions at least one business day in advance.

The City of Yakima reserves the right to reject any & all RFPs. The City hereby notifies all Proposers that it will affirmatively ensure compliance with WA State Law Against Discrimination (RCW chapter 49.60) & the Americans with Disabilities Act (42 USC 12101 et set.)

The City of Yakima has established a Disadvantaged Business Enterprise (DBE) program in accordance with regulations of the Department of Transportation (DOT) 49 CFR Part 26. It is the policy of the City to ensure that DBE's, as defined in 49 CFR Part 26, have an equal opportunity to receive and participate in DOT-assisted contracts. The City's current goal proposes that 0% of all DOT funds expended in DOT-assisted contracts will be let to certified DBE firms that are available, willing, and able. The City of Yakima hereby notifies all proposers that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit proposals in response to this invitation and will not be discriminated against on the grounds of race, color, sex, sexual orientation, or national origin in consideration for an award."

Dated August 2, 2023. Publish on August 2nd & 4th, 2023
Susan Knotts, NIGP-CPP, CPPO, CPPB
Buyer II

RFP Release Date: August 2, 2023

Proposal Receipt: Proposers must first register with PublicPurchase.com and Proposal shall be completely uploaded into PublicPurchase.com no later than the date and time listed below. Register as early as possible and do not wait until the due date to upload your documents, as this may take some time. Late Proposals will not be accepted or evaluated. If you try to submit a Proposal late, the electronic system will not receive it. Proposal openings are public. Proposals shall be firm for acceptance for ninety (90) days from date of Proposal opening, unless otherwise noted.

RFP's ARE ONLY RECEIVED THROUGH PUBLICPURCHASE.COM

Purchasing For: City of Yakima Transit Division 2301 Fruitvale Blvd. Yakima, WA 98902	Buyer in charge of this procurement (Contact for further information): Susan Knotts, NIGP-CPP, CPPO, CPPB Buyer II
Proposals Must be completely uploaded by: **September 7, 2023 at 2:00:00 PM PST** Public Opening ☑	Phone (509) 575-6095 E-Mail Address Susan.Knotts@YakimaWA.Gov

PROJECT DESCRIPTION SUMMARY

Onboard Integrated Technology System for Yakima Transit

Enter Prompt Payment Discount: _____% / net____days	We/I will complete project within _____days. **MUST BE COMPLETED NO LATER THEN DECEMBER 15, 2023.**

Delivery Details: FOB Destination, Freight Prepaid, Inside Delivery required

☐ I hereby acknowledge receiving **addendum(a)** _____, _____, _____, _____, _____, (use as many spaces as addenda received)

In signing this Proposal we also certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a Proposal; that this Proposal has been independently arrived at without collusion with any other Proposer, competitor or potential competitor; that this Proposal has not been knowingly disclosed prior to the opening of Proposals to any other Proposer or competitor; that the above statement is accurate under penalty of perjury.

Furthermore, the Washington State Interlocal Cooperative Act (RCW 39.34) provides that other governmental agencies may purchase goods or services on this solicitation or contract in accordance with the terms and prices indicated therein <u>if all parties agree</u>. The City does not accept any responsibility or involvement in the purchase orders or contracts issued by other public agencies.

We will comply with all terms, conditions and specifications required by the City of Yakima in this Request for Proposal and all terms of our Proposal.

Company Name	Company Address	
Name of Authorized Company Representative (Type or Print)	Title	Phone ( ) Fax ( )
Signature of Above	Date	Email Address

TABLE OF CONTENTS

I. DEFINITIONS

The following definitions of terms shall apply, unless otherwise indicated:

"**Buyer**" means the contact person listed on page 2 of this document.

"**City**" means the City of Yakima, Washington. Also referred to as "Owner".

"**Contract**" means written agreement between the "Owner" and the "Contractor" (or "Successful Proposer") that covers the delivery of work to be performed subsequent to this RFP.

"**Contract Manager**" means the individual in the City of Yakima Purchasing Division (Buyer) responsible for managing this RFP and subsequent contractual issues.

"**Contractor**" means a proposer that is awarded a Contract under this RFP and its employees or other personnel (including officers, agents and subcontractors) provided by the Contractor to perform work under this Contract.

"**Department**" means the City of Yakima, Department/Division.

"**Executive**" means the City of Yakima City Manager

"**Owner**" also referred to as City of Yakima.

"**Project Manager**" means the individual in City of Yakima Departments/Divisions and/or an assigned individual from the Contractor responsible for administering day-to-day operational matters of the Contract.

"**Proposal**" means the complete response of a proposer submitted on the approved forms and setting forth the proposer's prices for providing the services described in the RFP.

"**Proposer**" means any individual, company, corporation, or other entity that responds to this RFP.

"**RFP**" means Request for Proposal.

"**SOW**" means Statement of Work.

"**Subcontractor**" means any entity that enters into any agreement with the Contractor to fulfill the requirements and performance obligations of the Contract.

II.   GENERAL INFORMATION

1. **Introduction**

    The purpose of this Request for Proposal (RFP) is to provide interested parties with information to enable them to prepare and submit a proposal for Onboard Integrated Technology System for Yakima Transit. The City of Yakima (referred to as "Owner" throughout this document), Transit Division, as represented by City Purchasing, intends to use the results of this solicitation to award a contract for such services.

2. **Scope and Objectives**

    The City of Yakima, Transit Division, is requesting Onboard Integrated Technology System equipment and servicing as detailed below.

    The purpose of this solicitation is to establish a contract for the purchase and, at Yakima Transit's option, installation of hardware and technologies to create a functional, fully integrated technology system for use by Yakima Transit in its public transit fixed route buses. The overall goal is to continue to expand and improve its transportation operations while maintaining or increasing efficiency, customer service, and satisfaction measures in service delivery.

    The system should include an integrated on-board system with real time passenger information systems and back office systems to include CAD/AVL dispatching, scheduling and reporting with options for additional fixed route scheduling features. The system shall also include Automated Voice Announcements (AVA), Automatic Passenger Counting (APC) and Passenger Wi-Fi hotspot. Optionally, the system will include real-time information signs at transit center for predicting arrival times.

    The contract resulting from this solicitation may be funded by federal grants. The awarded Contractor shall comply with the entirety of the project-specific clauses set forth in this RFP. It is specifically noted that the _Davis-Bacon Act does not apply_ to the services to be performed as that effort involves no alteration of real property.

3. **Background and Current Operations**

    ABOUT THE OWNER
    The City of Yakima, county seat of Yakima County, was incorporated in 1886 and is located in central Washington State. It encompasses 28.7 square miles in an area of rich volcanic soil. The City is 145 miles southeast of Seattle, and 200 miles southwest of Spokane, Washington. The region is served by rail, highway and air transportation facilities, which have helped develop the City as the commercial and business center of Central Washington. With a 2020 population of 96,968 Yakima is the eleventh largest city in the State of Washington.

    The City provides the full range of municipal services contemplated by charter or statute. These include public safety (police, fire, and building), public improvements (streets, traffic signals), sanitation (solid waste disposal, sanitary wastewater utility), water and irrigation utilities, transit, community development, parks and recreation, and general administrative services.

    The City of Yakima lies within Yakima County in the fertile Yakima River Valley. Apples, cherries, pears, grapes, and other fruits, plus a wide variety of field crops and vegetables make the Yakima Valley one of the top agricultural producing areas of the nation. There are over 400,000 acres of Agriculture zoned land within the County which produce over thirty types of fruits and vegetables. With its farm production base, the Yakima area is a major food processing region.

Adding to the area's economy are over 250 manufacturing firms in the Yakima area that produces a variety of products including wood products, packaging, plastic products, produce and aircraft parts.

BACKGROUND
Current Fleet: Yakima Transit is a municipal agency of the State of Washington, which provides public transportation services. Yakima Transit currently operates 9 fixed-routes. Yakima Transit provides connecting service to the Yakima Airport, Greyhound, Union Gap Transit, People for People's Community Connector, and the Yakima-Ellensburg Commuter at the Yakima Transit Center. Yakima Transit currently operates a fleet of 26 fixed-routs buses. Routes, operations, and fleet size are subject to change.

A current list of fixed route vehicles is attached and can be found in **Attachment "A".**

Current Agency Infrastructure: Yakima Transit currently has Wi-Fi access in all buses. Yakima Transit has GTFS data available and provides customers with real-time bus location information online and with the City of Yakima iBus App.

CURRENT OPERATIONS
The City of Yakima Transit buses currently have cabling and connections compliant with the Society of Automobile Engineers (SAE) J-1708/1587 or J-1939 network standard, to form a Vehicle Area Network (VAN) connecting to a Mobile Data terminal (MDT) with standard industry farebox (future procurement), automatic passenger controller (APC), automated voice announcement (AVA) controller, interior digital media sign (DMS) for AVA and a cellular router for passenger Wi-Fi ; for common login, operation control and other integrated functionalities.

MDTs are also integrated with optional on-board equipment (when purchased) that may include TSP emitters, on-board surveillance systems and maintenance network gateways for vehicle component monitoring.

4. **Project Plan and Deliverables**

   A. **Currently Needed Hardware**

      1) The Contractor shall install communications cabling and connections compliant with the Society of Automobile Engineers (SAE) J-1708/1587 or J-1939 network standard, to form a Vehicle Area Network (VAN) connecting a:
         a. Mobile Data Terminal (MDT) with standard industry farebox (future procurement), automatic passenger controller (APC), automated voice announcement (AVA) controller, interior digital media sign (DMS) for AVA and a cellular router for passenger Wi-Fi; for common login, operating control and other integrated functionalities.
         b. Further, MDTs shall be able to be integrated with optional on-board equipment (when purchased) that may include TSP emitters, on-board surveillance systems and maintenance network gateways for vehicle component monitoring.

5. **Contracting Agency and Point of Contact**

   This RFP is issued by the City of Yakima Purchasing Division. The person responsible for managing this RFP process from beginning to end is the Buyer listed on page 2 of this solicitation. From the date of release of this RFP until a Notice of Intent to Award the Contract is issued, all contacts with Owners employees, and other personnel performing official business for the Owner regarding this RFP shall be made through the Buyer listed on page 2. Contact with other Owner personnel regarding this RFP is not permitted during the procurement process and violation of these conditions may be considered sufficient cause for rejection of a Proposal and disqualification of the Proposer.

6. **Public Records Access**

It is the intention of the Owner to maintain an open and public process in the solicitation, submission, review, and approval of procurement activities. Proposal openings are public.

7. **Proprietary Information**

Any consideration of proprietary information is the responsibility of the Proposer to object to through the courts following third party notice, not the Owner (City).

All information submitted in response to a request for public disclosure will be handled in accordance with applicable Owner procurement regulations and the Washington State Public Records Act (RCW 42.56 et seq.). It is the Proposer's responsibility to defend the determination in the event of an appeal or litigation.

Unless otherwise noted, data contained in a proposal, all documentation provided therein, and innovations developed as a result of the contracted commodities or services cannot be copyrighted or patented. All data, documentation, and innovations become the property of the Owner.

8. **Requests for Public Disclosure**

Washington State Public Disclosure Act (RCW 42.56 et seq.) requires public agencies in Washington to promptly make public records available for inspection and copying unless they fall within the specified exemptions contained in the Act, or are otherwise privileged. All documents submitted in relation to this Specification shall be considered public records and, with limited exceptions, will be made available for inspection and copying by the public.   It is the intent of the Owner (City) to post all RFP responses online and available to the public after the contract is signed.

Marking the entire submittal as "confidential" or "proprietary" is not acceptable and is grounds to reject such submittal. If, in the Owner's opinion, the material is subject to disclosure, the Owner will notify Proposer of the request and impending release which will allow the Proposer 10 days from notice to take whatever action it deems necessary to protect its interests. All expense of such action shall be borne solely by the Proposer, including any damages, attorney's fees or costs awarded by reason of having opposed disclosure and Proposer shall indemnify Owner against same. If the Proposer fails or neglects to take such action within said period, the Owner will release all materials deemed subject to disclosure. Submission of materials in response to this solicitation shall constitute assent by the Proposer to the foregoing procedure and the Proposer shall have no claim against the Owner on account of actions taken pursuant to such procedure.

9. **Retention of Rights**

The Owner retains the right to accept or reject any or all proposals if deemed to be in its best interests.

All proposals become the property of Owner upon receipt. All rights, title and interest in all materials and ideas prepared by the proposer for the proposal to Owner shall be the exclusive property of Owner and may be used by the Owner at its option.

10. **Clarifications and/or Revisions to Specification and Requirements**

If a Proposer discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in this solicitation, the Proposer has an affirmative duty to immediately notify the Buyer of such concern and request modification or clarification of the RFP document.

Unless instructions are specifically provided elsewhere in this document, any questions, exceptions, or additions concerning the subject matter of the RFP document(s) shall not be considered unless submitted via e-mail (no phone calls) to the Buyer listed on page 2, a minimum of five business (5) days prior to the submittal due date.

In the event that it becomes necessary to provide additional clarifying data or information, or to revise any part of this RFP, supplements or revisions will be provided to all known Proposers in the form of an Addendum. All Addenda are posted on www.yakimawa.gov/services/purchasing and www.publicpurchase.com and/or sent directly to interested parties who have registered for updates to this RFP.

If any requirements of the RFP are unacceptable to any prospective Proposer, they may choose not to submit a proposal.

11. News Releases

News releases pertaining to the RFP or to the acceptance, rejection, or evaluation of Proposals shall not be made without the prior written approval of the Buyer listed on page 2.

12. Proposer Conference and Site Visit

PRE-PROPOSAL CONFERENCE/SITE VISIT: A pre-proposal conference will be held at 1:30 p.m. on August 10, 2023 in the **in the Public Works Large Conference Room, located at the Public Works Facility.** Check in at the Kary Annex, 2301 Fruitvale Blvd., Yakima, WA 98902 for directions to the conference Room. Attendance is not mandatory; however, Proposers are STRONGLY urged to attend. If potential proposers wish to call in on a conference line, call Gregory Story, Transit Assistant Manager at 509-576-6422 or Susan Knotts, Buyer II at 509-575-6095 for instructions at **least one business day in advance**.

13. Examining Documents & Facilities

The Proposer is hereby advised that by submitting a Proposal, he/she is deemed to have studied and examined all facilities and all relevant documents and acknowledged all requirements contained herein before proposing.

14. Calendar of Events

Listed below are important dates and times by which actions related to this RFP may be completed. In the event that the Owner finds it necessary to change any of these dates and times it will do so by issuing an addendum to this RFP.

DATE	EVENT
July 31, 2023	RFP Issuance
August 10, 2023 @ 1:30 PM PST	Pre-Proposal Conference/Site Visit
September 1, 2023 @ 2:00 PM PST	Due date for written questions
September 4, 2023	Addenda -Written answers to questions
September 7, 2023 at 2:00:00 PM PST	**Proposals Due**
September 21, 2023	Interviews if needed (target date)
September 25, 2023	Intent to Award Issued (target date)
October 3, 2023	Signed Contract from Vendor (target date)
October 17, 2023	Contract Approved by City Council (target date)

The schedule of events after the Proposal due date will be handled as expeditiously as possible but are target dates and these date may change. An Evaluation Team will be formed to evaluate proposals and may or may not choose to interview Proposers. Every effort will be made to notify short-listed proposers of important post-opening dates.

15. Contract Term

See Section 3 of Contract.

16. Incurring Costs

The Owner is not liable for any cost incurred by a Proposer in the process of responding to this RFP including but not limited to the cost of preparing and submitting a response, in the conduct of a presentation, in facilitating site visits or any other activities related to responding to this RFP.

17. No Obligation to Contract

This RFP does not obligate the Owner to contract for service(s), or product(s) specified herein. Owner reserves the right to cancel or reissue this RFP in whole or in part, for any reason prior to the issuance of a Notice of Intent to Award. The Owner does not guarantee to purchase any specific quantity or dollar amount. Proposals that stipulate that the Owner shall guarantee a specific quantity or dollar amount will be disqualified (e.g. "all-or-none".)

18. Best Modern Practices

All work, including design, shall be performed and completed in accordance with the best modern practices, further, no detail necessary for safe and regular operation shall be omitted, although specific mention thereof may not be made in these specifications.

19. Equal/Approved Equal

These specifications are intended to be precise where a specific make, model or trade name is requested. Whenever a make, model or trade name is used, it shall be that or equal, or approved equal. Equal or approved equal means that the make, model or trade name will be given consideration if they fulfill the same performance requirements. The City reserves the right to make the decision on acceptability. Each proposer shall clearly identify make, model or trade name of equipment proposed in their proposal. Any equipment proposed as an equal to that herein specified must be substantiated with supporting data to justify such request for substitution.

20. More or Less

Quantities are estimated only and shall be bid on a MORE OR LESS basis. For the purpose of comparison, bid proposals shall be made in the quantities listed in this specification. Listed quantities shall not be considered firm estimates of requirements for the year, nor shall the City be bound or limited to quantities listed. Payment will be made only for quantities actually ordered, delivered, and accepted, whether greater or less than the stated amounts.

21. Delivery/Completion

Each proposer is required to list on the Cost Proposal form the number of calendar days he/she expects delivery to be made at the destination, in terms of time interval, following placement of each order. Time of delivery is important and will be considered in the evaluation of the Proposals. Failure to include a specific number of calendar days may be sufficient grounds for rejection of Proposal.

22. Delivery Acceptance

Delivery will be accepted by Yakima Transit, 2301 Fruitvale Blvd, Yakima, Washington, 98902, between the hours of 8:00 a.m. and 4:00 p.m. Monday through Friday, ready for regular and safe operation. The successful Contractor's personnel making the delivery shall instruct City personnel in maintenance and proper operation of the equipment prior to their departure from the delivery site. All equipment shall have complete pre-delivery setup and service.

23. Delivery of Unapproved Substitutions

Contractors are authorized to ship only those items ordered covered by the contract. If a review of orders placed by the City reveals that an item other than those covered by and specified in the contract have been ordered and delivered, the Purchasing Manager will take such steps as are necessary to have the item(s) returned to the Contractor at no cost to the City, regardless of the time elapsed between the date of delivery and discovery of the violation.

III.   PREPARING AND SUBMITTING A PROPOSAL

1.   General Instructions

The evaluation and selection of a Contractor will be based on the information submitted in the Proposal plus references, and any on-site visits or best and final offers (BAFOs) where requested. Failure to respond to each of the requirements in the RFP may be the basis for rejecting a Proposal.

2.   Organization and Format of Required Proposal Elements

Proposers responding to this RFP must comply with the following format requirements. The Owner reserves the right to exclude any responses from consideration that do not follow the required format as instructed below.

Proposals shall be organized and presented in the order and by the numbers assigned in the RFP with each heading and subheading should be separated by tabs or otherwise clearly marked.

Tab 1 - Table of Contents
Provide a table of contents for the Proposal.

Tab 2 - RFP Signature Sheet
Complete and sign the signature Sheet, which is page 2 of this RFP solicitation.

Tab 3 - Transmittal Letter
The transmittal letter must be written on the Proposer's official business stationery and signed by an official authorized to legally bind the Proposer. Include in the letter:

1) Name and title of Proposer representative;
2) Name, physical and mailing address of company;
3) Telephone number, fax number, and email address;
4) RFP number and title;
5) A statement that the Proposer believes its Proposal meets all the requirements set forth in the RFP;
6) A statement acknowledging the Proposal conforms to all procurement rules and procedures articulated in this RFP, all rights terms and conditions specified in this RFP;
7) A statement that the individual signing the Proposal is authorized to make decisions as to the prices quoted and that she/he has not participated and will not participate in any action contrary to the RFP,
8) A statement that the Proposer will be making a number of representations outside of its formal Proposal document in, possibly, discussions, presentations, negotiations, demonstrations, sales or reference material and other information-providing interactions and as such hereby warrants that the Owner can rely on these as inducements into any subsequent contract, and be made a part thereof;

Tab 4 - Response to General Requirements
Provide a point-by-point response to each requirement specified in Sections IV. *General Requirements* of this RFP. Responses to requirements must be in the same sequence and numbered as they appear in this RFP. Responses that fail to meet the mandatory requirements shall be deemed non-responsive.

Tab 5- Response to Technical Requirements

Provide a point-by-point response to each requirement specified in Section V, *Technical Requirements* of this RFP. Responses to requirements must be in the same sequence and numbered as they appear in this RFP. State whether if you comply 100% with that particular specification, or indicate that you do not comply 100% and explain how your product/service deviates. Deviation on any item will not necessarily disallow proposal. The Owner shall be the sole judge as to whether a deviation/exception is acceptable, or not.

- **Provide Support and Upgrade Terms and Conditions with Proposal submittal under Tab 5.**

Tab 6– Sample Contract and Terms and Conditions

The Sample Contract, General and Special Terms and Conditions provided with this RFP represents the terms and conditions which the Owner expects to execute in a contract with the successful Proposer. Proposers must accept or submit point-by-point exceptions along with proposed alternative or additional language for each point. The Owner may or may not consider any of the Proposer's suggested revisions. Any changes or amendment to any of the Contract Terms and Conditions will occur only if the change is in the best interest of the Owner. Proposers may not submit their own contract document as a substitute for these terms and conditions.

Tab 7 – Required Forms

Include here any additional completed forms required in the RFP. Failure to complete and/or provide any required forms may result in disqualification of proposal, including, but not limited to:

- Signature Sheet   Page 2
- Proposer Questionnaire   Pages 44-47
- Proposer References   Page 48
- DBE Personnel Inventory Form   Page 49
- Buy America Acknowledgements and Certificate   Page 66
- DBE Utilization Form   Page 73
- DBE Identification & Information Form   Page 73
- Fly America Statement   Page 76
- Lobbying Restrictions Certification   Page 78

Tab 8 - Cost Proposal as identified in Section VI.

Provide all cost information according to the instructions provided and the Cost Proposal Form on pages 39 and 40. Include all costs for furnishing the product(s) and/or service(s) included in this proposal. Identify all assumptions. Failure to provide any requested information in the prescribed format may result in disqualification of the Proposal. Also include on a separate sheet under this tab a list of all Optional Services and the price for each service. If service is not provided please state so.

3. **Prohibition of Proposer Terms & Conditions**

A Proposer may not submit the Proposer's own contract terms and conditions in a response to this RFP. If a proposal contains such terms and conditions, the City, at its sole discretion, may determine the proposal to be a nonresponsive counteroffer, and the proposal may be rejected.

4. **Submitting a Proposal**

Proposals shall be completely uploaded into Public Purchase.com no later than the date and time listed on Page 2 of this RFP. Late Proposals will not be accepted or evaluated. If you try to submit a Proposal Late, the electronic system will not receive it.

If City Hall is closed for business at the time scheduled for opening, for whatever reasons, Proposer's response will be opened on the next business day of the City, at the originally scheduled hour.

Proposers must submit their response electronically through PublicPurchase.com where they will be kept in an electronic lockbox until date and time of opening. To register as a Vendor/Proposer with Public Purchase, go to www.publicpurchase.com or the City of Yakima website at www.YakimaWA.Gov/Services/Purchasing. The City is not responsible for late proposals due to operator error, electronic malfunction, system errors or interruptions affecting the Public Purchase site and the processing of any proposals. The Purchasing Manager reserves the right to make exceptions for extenuating circumstances.

Any sections deemed by proposer to be confidential per Washington State Public Disclosure Act (RCW 42.56 et seq.) shall be separated from the main document and uploaded to Public Purchase in a separate file marked "confidential". All other sections of the response shall be made available to the public immediately after contract signing. All materials required for acceptance of the Proposal by the deadline must be uploaded to Public Purchase.

5. **Multiple Proposals**

Multiple Proposals from a Proposer will be permissible; however, each Proposal must conform fully to the requirements for proposal submission. Each such Proposal must be submitted separately and labeled as Proposal #1, Proposal #2, etc. on the first page of their response.

6. **Withdrawal of Proposals**

Proposers may withdraw or supplement a proposal at any time up to the proposal closing date and time. If a previously submitted proposal is withdrawn before the proposal due date and time, the Proposer may submit another proposal at any time up to the proposal closing date and time. After proposal closing date and time, all submitted Proposals shall be irrevocable until contract award.

IV.   PROPOSAL GENERAL REQUIREMENTS

The purpose of this section is to provide the Owner with a basis for determining a Proposer's capability to undertake this Contract. Responses to this Section will be scored.

1. **Recap Scope of Work**

The proposal should recap the Scope of Work to provide a detailed approach to be used in conducting the Implementation and amenities study project. Contract shall include example of past implementation project plans and amenities studies.

2. **Proposer Qualifications**

Proposer must have at least three (3) years of experience in successful.

3. **Staff Qualifications**

Staff involved within the scope of this project must have at least five years of experience in.

Identify and provide a resume for the Project Manager that will be assigned to this project and any additional projects they will be involved in during the Contract term. The Project Manager will be the primary point of contact for Owner and must be available on an as-needed basis. Describe how the Project Manager will guarantee availability to Owner during the entire duration of the project.

Identify additional key personnel from your company that will be assigned to this contract, including their current job title and the role they will play in the project. For each staff person, attach a brief resume with any pertinent

licenses or accreditations and give at least one (1) example of a project where the staff provided similar services to an organization with needs similar to those described in this RFP.

Identify the Account Manager who will be handling all invoices and billing and will serve as the account main point of contact for this contract.

If any of these contacts change during the contract term, the Contractor shall verbally notify the Owner within twenty-four (24) hours of change and follow up in writing within five (5) business days of the date of change.

4. **Organizational Capabilities**

Describe your company's experience providing services similar to those required by this RFP to customers of comparable size, scope and circumstance.

Provide an organizational chart for your company and include an issue escalation process used to resolve any potential issues between the Owner and the Contractor during the Contract term.

5. **Experience Statement**

A. Describe when the Contractor was founded and provide a professional history of the Contractor and its principals.

B. Describe Contractor's relevant experience and relate that experience to your understanding of the skills necessary to complete this contract.

C. Identify examples of contracts and experience with public agencies.

D. List any contracts that were terminated prior to end of contract term in the last 10 years.

6. **Points Not Addressed**

Proposers are encouraged to list any points not addressed in these specifications that they feel improve or enhance the operation of their unit.

7. **Proposer References**

The Owner will determine which, if any, references are contacted to assess the quality of work performed. The results of any reference checks will be provided to the Evaluation Team for this RFP and will be used when scoring the written proposal.

Using the form provided, submit at least three (3) references (preferably from WA State or Northwest transit agencies) who can attest to the Contractor's experience as it relates to implementation services for changes to Yakima Transit's fixed route bus system. The references must include current contact name, title, address, e-mail address, and telephone. Include a clear, concise description of the project.

8. **Contract Performance Requirements**

Proposer must agree to provide all deliverables identified in Section II., Scope and Objective.

A. Within five (5) business days of Contract award, Contractor must provide a final work plan to Owner that identifies a chronological outline of all activities related to the project, key timelines and the deliverables that will be provided which shall include all deliverables identified in Section V.

B. Contractor's analysis must, at a minimum, identify potential efficiencies and unnecessary duplication of efforts and process redundancies.

9. **Questionnaire**

Proposer must complete the Proposer Questionnaire Form in Section VIII and submit it with their proposal response.

V.   TECHNICAL REQUIREMENTS

Responses to each requirement must indicate that the Proposer either "does comply" with the requirement or "does not comply". No explanation is required, as non-compliance with any of the following requirements will result in proposal rejection and remove that Proposal from further consideration.

If Proposer feels the Mandatory Proposal Requirements are proprietary, contact the Buyer listed on the Signature Sheet to determine if requirements should be changed.

1. **Functional Requirements**

   A. The selected Contractor shall provide hardware, all brackets, nuts, bolts, connectors, and all integration and installation necessary to provide a fully operational system for each vehicle.

   B. The project management services to be provided include, but are not limited to, those related to management and coordination of ITS component compatibility, testing of installed ITS equipment to ensure proper functionality, and other functions as needed in the successful deployment of ITS components.

   C. Specific responsibilities of the successful proposer will include, but will not be limited to, the following:

      1) Coordinate the installation of, or if so requested by City of Yakima, physically install, ITS components (hardware and software) on fixed route vehicles.
      2) Testing of ITS components before, during, and after installation to ensure proper functionality.
      3) Ensure compatibility and coordination of effort and information between the various ITS components (e.g. Single-button settings, shared GPS, wireless communications, etc.)
      4) The proposed solution will be a cloud solution. The Contractor must supply all hardware, operating system software, application software and applicable licensing to support the appropriate number of users.
      5) All hardware, purchased or replaced, must be new, compatible and successfully and seamlessly interface with the current software.
      6) All hardware installed on the vehicle must be able to withstand the harsh environment of a public transportation bus. Hardware must be able to function within temperatures of -16.1°F below zero and 109.0°F above zero, Fahrenheit.
      7) Maintenance and upkeep of ITS components per contractual requirements.

2. **Automatic Vehicle Location (AVL) System**

   A. **Mapping Functional Requirements**

      1) Several basic features must be available when using the mapping component, including:
         a. Pan, zoom in, and zoom out of the map, using both the mouse and shortcut keys
         b. Undo pan and zoom actions.
         c. Mini-map display that allows the dispatcher to see Yakima Transit's service area and to quickly select an area to see on the main map.
         d. Latitude/Longitude and address must be displayed at the location of the mouse pointer on the map.

e. Ability to hide or display Bus stops on the map. Bus stop information including stop name, routes served, and upcoming bus arrivals can be viewed when bus stop is shown.

2) Mapping tools must be provided that include:
   a. Proximity Circle tool that will display all vehicles within a certain, user-selected radius of a given address point. This circle should generate a list of vehicles within its boundary. Search results can also include different map layer elements. Tool can also be used to display a table of the closest vehicles to a given address point (as the crow flies).
   b. Address search.
   c. Point of interest search.
   d. Ability to locate a vehicle, facility, bus stop or point of interest within a specified proximity to a point on the map.
   e. Distance tool that will display the distance between 2 or more specific points. This must provide the user the option of distance as the crow flies, or by street segments.
   f. It must be possible to open a secondary AVL window that contains the same map functionality as the primary AVL window. The secondary window must be able to be opened or closed as required, typically to temporarily monitor specific vehicles or routes.

3) Map attributes and layers must include:
   a. Map Views: multiple views must be supported, consisting of the various layers that a user wants to display on the AVL map.
      i. Map views must be able to be toggled in real-time.
      ii. Street names should be displayed at a defined zoom level.
      iii. Display of information associated to GIS elements in ESRI format shape file(s).
   b. Route Visualization:
      i. Routes should be able to be hidden or shown individually.
      ii. Locate route: the map should pan and zoom to display the whole route.
      iii. A route's display must consist of a set of lines and stops. The choice of line for individual routes should be configurable.
      iv. It must be possible to show time points, pattern points, RSA corridors and non-display patterns for visible routes.
   c. Facility Visualization: User must be able to display or hide any facilities
      i. Facilities should be able to be hidden or shown individually.
      ii. Locate facility: the map should pan to display the facility and indicate the facility's location.
      iii. A facility's display must consist of an icon, and an icon's shape, color, and size must be configurable.
   d. Geofence Visualization: Users must be able to create geofences
      i. Geofences should be able to be hidden or shown.
      ii. Locate geofence: there must be a means for the user to pan the display to a specific geofence and indicate the geofence's location.
   e. Vehicle Attribute Visualization: From the map view the user must be able to select a vehicle icon and configurable text should display the vehicle's current information (including vehicle type, schedule adherence status, and route adherence status)
      i. Vehicle ToolTip: hovering over a vehicle with the mouse must display configurable information about that vehicle.

3.   **Vehicle Tracking Functional Requirements**

   A.   **Tracking Functional Requirements**

   1) Software must provide a vehicle table that displays relevant information about the Yakima Transit vehicles, including:
      a.   Location, Route and Schedule Adherence, Current Work and GPS Troubleshooting.
      b.   Quick View Pane: Displays the most relevant information of the selected vehicle
      c.   Vehicle Detail: User will be able to view vehicle details including:
         i.   Vehicle Information: Make, Model, Year, VIN, License plate
         ii.   Schedule and route adherence status
         iii.   Assignment Status (logged on/off, pulled in/ On out, Assignment)
         iv.   Event Type associated to that vehicle
         v.   Communication status (in/out of coverage)
         vi.   User entered notes
         vii.   List of installed devices
         viii. Reporting Rates Configuration
         ix.   Location information
         x.   Current Work
         xi.   Current Passenger Capacity
         xii.   GPS status
         xiii. Fuel Configuration (fuel type & consumption rates)

   2) Locate vehicle function: the map view must be able to automatically pan and display the vehicle and indicate the vehicle's location.

   3) Follow vehicle function: must provide a map view that automatically pan to a specified vehicle and continue to pan the map to keep the vehicle displayed on the screen.

   4) Poll vehicle: poll a selected vehicle to obtain its current GPS location in real-time.

   5) Vehicle reporting rate control: be able to change the GPS reporting rate of a vehicle or group of vehicles.

   6) To minimize wireless costs schedule adherence should be calculated on the vehicle and only reported to Dispatch when there is an exception to a configurable adherence window.

   7) Text Messaging: Send a text message to selected vehicles.

   8) Vehicle Filters: Users must have the following tools when viewing vehicle details:
      a.   Global filters should be able to be created by Yakima Transit, as well as individual ones by the dispatcher.
      b.   Vehicles should be able to be filtered by their GPS properties (GPS status, antenna functionality, GPS reporting).
      c.   Vehicle filters should be able to be created based on the following criteria:
         i.   The vehicle geographic location
         ii.   The vehicle type
         iii.   Vehicle GPS properties (GPS status, antenna functionality)
         iv.   The vehicle garage (Facility)
         v.   The vehicle current route
         vi.   Individual vehicles

   9) It must be possible to temporarily increase a vehicle's location reporting rate.

4.   **Mobile Data Terminal (MDT)**

   A.   Hardware Functional Requirements

   1) The MDT and all other on-board equipment must be of commercial (not consumer) grade and ruggedized

to operate within a transit environment.

2) The MDT In-Vehicle Hardware shall include the following:
   a. A color display and touch screen for driver input.
   b. Computer processing and operating system for the MDT software.
   c. Hard-wired connections to the vehicle interfaces and between the in-vehicle peripheral equipment (e.g. AVA system, APCs, integrations to headsigns and fare boxes as specified). Wireless links in the Vehicle Area Network (VAN) or between the MDT and the VAN are not acceptable.
   d. Antenna systems internal to the MDT for GPS, Wi-Fi and cellular data are preferred to minimize the need for extra cabling and antenna installations on the bus and negate tampering.

3) MDT Specifications (minimum):
   a. Memory
      i. Internal SD card for flash memory, upgradeable to 32 GB
      ii. External SD card socket
   b. GPS / AVL
      i. Integrated 50-channel GPS receiver with internal antenna (connector for optional external antenna)
   c. Wireless Modems Cellular Access
      i. Integrated modem for public data network (e.g., EVDO, HSPA, LTE)
      ii. Certified by proposed carrier
      iii. Integrated 802.11/b/g/n Wi-Fi data modem with internal antenna (connector for optional external antenna)
      iv. Optional Bluetooth capabilities
   d. User Interface
      i. Color display with touchscreen
      ii. Multi-button keypad w/LED backlight (able to configure function of keys)
      iii. Ambient light sensor for automatic backlight adjustment (also with driver adjustable backlight control)
   e. Adjustable mount hardware for the MDT. The mount hardware will allow drivers to reposition the angle and tilt of the display.
   f. Cabling for connections to the applicable on-board equipment, antennas, power, and ignition switch.

B. Software Functional Requirements

1) The MDT Software should provide the vehicle operator with the following information/functionality:
   a. Driver Log On screen that appears immediately after the Mobile Data Terminal powers up. The driver will be prompted to enter his Driver ID and PIN number.
   b. Driver Log On should automatically act as log on to other connected ITS systems on the vehicle, such as:
      i. Head sign
      ii. Voice Annunciator (AVA)
      iii. Automatic Passenger Counter (APC)
      iv. Farebox
   c. View of work assignment with stop arrival/departure times. This information will be updated as stops and time points are passed.
   d. Route Adherence Status.
   e. Schedule Adherence Status
      i. Adherence status should be calculated and displayed on the MDT for timely action by the operator.

       ii. Acceptable schedule adherence should be based on a time window that can be configured by the CAD/AVL system administrator.

      iii. Only schedule adherence exceptions should be transmitted and displayed for the Dispatcher to minimize wireless data usage.

f.   Manual Passenger Counting Capability

       i. A MDT screen should be available to Drivers to assist with counting of passengers boarding and alighting.

      ii. Passenger counting screen shall be configured to automatically be displayed to the Driver when the door(s) open.

      iii. Minimal button presses shall be required by Driver to record the number of passengers that have boarded or alighted before departing the stop. Vehicle load data shall be calculated and made available to the Driver on the MDT.

      iv. Count and vehicle load information shall be sent back to the office CAD/AVL software automatically over the wireless network after departing each stop.

       v. MDT should allow for bus operator to manually enter different fare types in the absence of an automated farebox.

g.   Two-Way Messaging

       i. A selection of canned messages (as defined by Yakima Transit) will be available to the Driver on the terminal. The Driver can send a message to Dispatch with a minimum of distraction, and only when the vehicle is not in motion.

      ii. The Driver will be able to receive the following message types from the Dispatch software:

         a) Normal Messages – These text messages appear in the Text Message summary screen and can be viewed by the driver at their convenience.

         b) Priority Messages: If the vehicle is in motion when a message is received the Driver will be alerted with a sound. When stopped, these messages will pop up on the driver display and require the driver to press a key to verify that the message has been received and read. The message will not be removed from the screen until the driver acknowledges the message.

         c) Response Required Message: The operator must respond to the message with either a Numerical value (keypad to be provided on touchscreen) or by using YES/NO touchscreen keys.

      iii. RTT/PRTT - a driver may send a Request to Talk (RTT) or Priority Request to Talk (PRTT) message to a Dispatcher via preconfigured RTT and PRTT button on the MDT.

      iv. Once a RTT/PRTT message is delivered to the central system, it will be shown on the dispatcher's event screen, together with the time received. The dispatcher can then take the appropriate action with their existing radio system to set up a voice call with the driver.

h.   Provide interface with additional onboard devices (APC, annunciator, LED signs) for triggering actions at designated locations.

C. General MDT Operations/Information

1) The following information and functionality shall be available on the MDT:

a. GPS status of the vehicle will be displayed, to show GPS lock or no-lock status.

b. The software version of the application will be shown

c. A control should be provided to the Driver to adjust the display backlight intensity.

d. A control should be provided to the Driver to adjust the speaker volume.

e. The software will have a function key that can toggle the screen graphics back and forth from a daytime version to a nighttime version. The daytime graphics will be designed for good readability under well-lit conditions, while the nighttime graphics will be designed for dark conditions.

D. Communication Functionality

1) The MDT Software will be capable of the following communication features:
   a. When sending messages over the wireless network, the MDT must be capable of queuing messages in a buffer and repeatedly attempting to deliver them to the host application. Each message type must be configurable to attempt delivery indefinitely or to attempt delivery only for a fixed period of time after which the message will be discarded. This sending method is known as STORE and FORWARD.
   b. When sending messages over the wireless network, the MDT must be capable of sending messages that are sent only once, regardless of whether they are acknowledged. This sending method is known as SEND and FORGET.

E. MDT Management Software

1) The system must allow Yakima Transit to remotely download new software and files to the mobile data terminal, including at a minimum:
   a. Ability to remotely deploy both application updates as well as complete operating system updates over-the-air, including:
      i. Mobile applications and operating system updates
      ii. Bus schedules
      iii. Annunciator message files
   b. Support for scheduling of over-the-air pushing and installation of software updates.
   c. Compression and packet-level resume of transfers to minimize over-the-air data.

F. Remote Diagnostics of the MDT

1) Over-The-Air Functionality Include:
   a. Graphical dashboard allowing users to monitor fleet health at a glance.
   b. Ability to remotely obtain screen captures of any in-vehicle MDT.
   c. Ability to remotely access the registry and file system of MDTs.
   d. Ability to start/end individual processes on any mobile terminal wirelessly.
   e. Ability for units to automatically report critical event information and logs to the server for analysis.
   f. Ability to notify system administrators via email when critical events occur on MDTs, and the ability for system administrators to view events.

G. Accurate Record Keeping

1) The system must automatically catalogue all programs and updates sent to the terminals, replacing error-prone manual record keeping. The system should quickly determine which units are due for an upgrade.

2) Comprehensive reporting suite with reports ranging from monthly MDT data usage to complete MDT software version information.

H. Retrieve Files Remotely

1) The system must provide data logging capabilities that can remotely retrieve data log files such as GPS or speed logs for immediate use in emergency situations.

5. **MDT/AVL Reporting**

A. Functional Requirements

1) The MDT In-Vehicle Hardware must have the capability to report AVL/GPS information to the dispatcher

center in each of the following ways:

    a. Event Based Reporting – When a function is performed (e.g. door opening, bus off route, speeding, etc.) the location of the vehicle is reported along with any data relevant to the performance of that particular function.

    b. Distance Traveled Reporting – every time the vehicle has moved a predetermined distance the Mobile Computing Device automatically reports the vehicle's location to the host AVL system. The advantage of this method is that it eliminates unnecessary reports from vehicles that have not moved from their previously reported positions.

    c. Time Elapsed Reporting – every X minutes (X being a predetermined value) the MDT automatically reports the vehicle's location to the host AVL system. The reporting rate should be configurable for single vehicles or groups of vehicles from the Host-end Application software.

    d. Hybrid GPS Reporting – system that incorporates the advantages of all three of the preceding methods. The key idea of AVL is to receive information ONLY WHEN desired and not waste airtime sending GPS information that is not useful to the dispatch operations.

    e. Poll-on-Demand – MDT capable of reporting GPS based on an AVL poll request message from the Host-end Application Software.

    f. Maximum Report Rate – MDT unit can be set to report GPS not more than every X minutes. E.g., the MDT unit can be set to not report GPS more than once a minute to conserve air time and bandwidth.

    g. Emergency – Reporting rates can automatically be adjusted in the case of an emergency.

6. Automated Voice Annunciation System (AVA)

  A. Functional Requirements

    1) Meet the requirements of the Americans with Disabilities Act (ADA).

    2) Automatically announce and display recorded information about each stop, major intersection, key locations, transfer opportunities, and route destination in each Yakima Transit fixed route vehicle prior to arriving at that location; and

    3) Provide the ability for authorized personnel to record the announcements and construct the related text at a centrally-located location, transferred to buses and to have those announcements associated with the appropriate trip.

    4) An AVA shall be installed on each Agency fixed-route vehicle.

    5) Announcements shall be created utilizing text-to-speech technology.

       a. Programming a new announcement should be as simple as typing it in a text file in a desktop application.

       b. A desktop preview program must be provided that permits testing of the announcements prior to use onboard a bus and permits tricky pronunciations to be spelled phonetically.

       c. It must be easy to quickly and easily create custom dictionaries.

       d. English and Spanish language must be supported.

       e. If possible, Yakima Transit should be able to utilize pre-recorded .wav file announcements.

    6) The AVA shall function as follows:

       a. As each Yakima Transit fixed route vehicle approaches a stop, major intersection, or other designated location, a digitally-recorded announcement shall be automatically made over the on-board public address (PA) system speakers (it is the responsibility of the proposers to test the vehicle PA system speakers for proper operation and provide speakers or replace speakers as needed) and displayed on an LED sign inside the vehicle to inform passengers about the next stop.

       b. The volume of the announcements shall be automatically adjusted according to the noise level on the vehicle at the time.

       c. No vehicle operator interaction shall be required to operate the annunciation system. However,

the vehicle operator shall have the ability to manually operate the system whenever it is deemed appropriate to do so. Further, the vehicle operator's use of the on-board PA system shall override any automated announcements.

7) In the event that a vehicle is operating off-route, the automated announcements/displays shall not be made. The system shall detect reacquisition of the route, at any point along the route, and automatically determine and announce the next valid bus stop or other designated location. Off-route and on-route detection and recovery shall be automatic and not require operator intervention or action, nor shall it require the vehicle to be driven to special reacquisition points.

8) The location information announced/displayed shall be the name of the stop, the location of the stop (if different from the stop name), transfer opportunities (if the potential route is currently operating), and other information to be determined at a later date (e.g., points of interest located close to the stop). The annunciation system shall use the vehicle location information from the AVL to trigger these announcements on-board the vehicle whenever the vehicle enters a "trigger zone." A trigger zone is a user-defined area that is located just prior to each stop location configurable by the vehicle on both a global basis or as superseded on a stop-specific basis. For example, the trigger zone may begin 800 feet before each stop or other announcement location.

9) Optionally, at each stop, as the doors are opened for passenger boarding, a route/destination announcement shall be made outside the vehicle. The volume of the external announcement must be able to be set globally dependent on the time of day and location that the announcement is being made.

10) In addition to next stop announcements/displays, the annunciation system shall be capable of making time-based, location-based and vehicle operator-initiated announcements/displays. Time-based announcements/displays shall be programmed to be made on-board the vehicle at specific times of the day, days of the week, or within specified time periods. Separate announcements/displays shall be programmed to be made on-board the vehicle when that vehicle is at a specific location(s).

11) Vehicle operator-initiated announcements/displays (e.g., safety-related announcements) shall be programmed to be made at the vehicle operator's discretion. The system shall be able to store up to a total of 99 time-based, location-based and vehicle operator-initiated announcements/displays on the MDT.

7. In-Vehicle Hardware Requirements

A. The AVA shall utilize the AVL MDT to the extent possible to provide the following capabilities:

1) Automatically initiate audio announcements and sign displays;

2) Communicate with the AVL system and other on-board systems, as necessary; and

3) Provide the vehicle operator with manual control of the system, if necessary;

4) Dual-channel high fidelity audio capable of playing simultaneous internal (and optional external) announcements;

5) Two built-in 20-watt amplifiers; or whatever size to sufficiently be audible.

6) Noise-sensing device for each audio channel, which shall automatically and independently adjust each channel's volume as appropriate in response to ambient noise detected; and

7) Independent volume control for each audio channel, automatically adjusted for ambient noise.

8. In-Vehicle LED Signage

A. Functional Requirements

1) The internal LED display sign for each fixed route vehicle shall display coordinated text from the AVA system to display the following:
    a. Current date and time of day
    b. Stop Requested announcements
    c. Next stop announcements
    d. Landmark or attraction announcements
    e. Yakima Transit generated PSA announcements
2) The LED sign shall meet all ADA requirements for internal signage

9. Automated Passenger Counter (APC) Systems

A. Functional Requirements

1) Contractor must provide Automatic Passenger Counter (APC) equipment to collect passenger boarding and alighting counts on the vehicles and report counts back to Yakima Transit's CAD/AVL software.

2) Each doorway on an equipped vehicle shall be fitted with one or more APC sensors.

3) The APC sensors for each doorway will be mounted above the doorway passage, involving the use of infrared beam technology and no need for direct contact with passengers.

4) Floor treadles shall not be incorporated into the doorway sensor design.

5) The APC sensor for each doorway shall be connected to a single APC controller.
    a. The APC controller shall be connected to the standard SAE J-1708/J-1587 or J-1939 VAN Vehicle Area Network (VAN) to enable communication with the MDT.
    b. The APC sensors may alternatively be each connected directly to the J-1708/J-1587 or J-1939 Vehicle Area Network (VAN) to enable communication with the MDT without any intermediate APC controller.

6) Counts the number of passengers boarding and alighting at each stop, separately for each doorway.

7) Stores the boarding and alighting counts on-board, for each stop and doorway, including the GPS latitude and longitude for the stop location as well as the current date, time, block, route and trip.

8) Maintains the current vehicle occupancy, based on the cumulative boardings and alightings.

9) Assigns count records to stops based on GPS locations.

10) Transfers the stored counts date to the central transit management system via the cellular or wireless network.

11) Receives and implements APC subsystem software and data updates, from the central transit management system, via the cellular or wireless network.

12) Provides a combination of pre-defined reports and the ability to create ad-hoc reports based on the APC data.

13) Supports data post-processing to improve the accuracy of the APC data.

14) Provides interface between APC post-processed data and standard GIS systems for service planning analysis.

B. APC Performance Requirements

1) The doorway sensors shall be able to count and differentiate between boarding and alighting passengers.

2) The doorway sensors shall be able to separately count successive passengers that are walking as close together as is practicable, either one behind the other or side by side.

3) The doorway sensors shall be able to count the moving passengers with heights between 1 meter in height

and a maximum height of the doorway.

4) The doorway sensors shall be able to count moving passengers with speed between 0.1 and 3 meters per second.

5) The doorway sensors shall be able to separately count a small child being carried by another passenger.

6) The doorway sensors shall not register as multiple passengers the passage of a single passenger that reaches into or out of the doorway passage, or is swinging their arms, while passing through the sensor beams.

7) The doorway sensors shall not separately count objects carried by passengers such as shopping bags or umbrellas.

8) Boarding and alighting counts shall only be recorded when the doorway is open. This will avoid any counting of passengers moving in the vicinity of the doorway passengers between stops.

9) Boarding and alighting counts shall only be recorded when the vehicle MDT is logged into the revenue service run. If there is a bus breakdown and passengers need to transfer to a replacement bus, this will allow the passenger transfer to be done with both buses logged out of the run so the transferring passengers are not erroneously double-counted.

10) The percent error for boarding or alighting counts at a given doorway, measured at a given stop, shall be calculated as: absolute value of (measured count minus observed count) divided by (observed count). For example, if 7 passengers were observed boarding through the front door at the stop and the APC system recorded 8 passengers boarding, the percent error would be 1/7 (i.e., 14%)

11) The average percent error for both boardings and alightings for each vehicle doorway shall be 5%, under the full range or ambient illumination conditions and for ambient temperatures.

12) A sample of at least 50% error observations shall be collected at various revenue service stops, for both boardings and alightings at each vehicle doorway, and the average percent error for each sample shall be within the range 3% to 7%.

13) The APC subsystem shall be interfaced with a wheelchair lift sensor, with the number of wheelchair lift operational cycles at each stop is also recorded.

14) For each stop, a data record shall be created to store the number of boarding and alighting passengers for each doorway and the number of wheelchair lift activations.

15) Each data record shall include the current GPS latitude and longitude (if the GPS receiver indicates that it currently has GPS lock), as well as the current date/time, block, vehicle number, vehicle operator ID, run number, route and trip number.

16) The date/time of any separate APC controller shall be updated at least one per day from the MDT.

17) Data records may be stored in either the APC controller or the MDT, with sufficient on-board memory capacity to allow for storage of at least 72 hours of APC data.

18) On-board memory shall be non-volatile storage so that a power supply is not required to retain the stored APC data records.

19) The APC controller shall be connected to the MDT to support annual and as-needed calibration of the doorway sensors and review of stored data records.

C. APC Installation Requirements

1) APC sensors shall be mounted to avoid any protrusions into the doorway passage, with sealed windows for the infrared beams.

2) Cabling to the doorway sensors shall be shielded and routed to avoid sources of electromagnetic interference, such as fluorescent lighting ballasts.

3) The doorway sensors and APC controller shall be mounted in locations that are not accessible to the

driver.

4) The alignment of the doorway sensors shall be calibrated after installation, to establish the alignment settings for each vehicle that achieve the most accurate performance (and the calibration settings for each vehicle shall be documented for future reference by Yakima Transit).

D. APC Test Requirement

1) The Test Procedures shall be prepared by the Contractor and accepted by Yakima Transit prior to the start of any acceptance testing. The Test Procedures shall define which specification performance requirements are to be demonstrated through each of the following stages of acceptance testing. The Test Procedures shall define for each performance requirement the test stage, test procedure and the test result that would constitute a successful demonstration of the performance requirement.

E. Factory Acceptable Testing

1) Factory Acceptance Testing shall be completed prior to any installations of the APC subsystem.

2) Factory Acceptance Testing shall use a complete bench test configuration for the APC subsystem that would be installed on a single vehicle, at a facility provided by the Contractor such as their factory.

3) The bench test configuration shall include at minimum the following components: (1) doorway sensors installed in two doorway passages with dimensions corresponding to the doorway passages in the actual Yakima Transit vehicles to be used; (2) integration of the doorway sensors with the APC controller and MDT (or directly with the MDT), to allow the boarding and alighting counts for test passages through each doorway to be reviewed; and (3) integration with simulated doorway closure sensors.

F. Proof of Performance Testing

1. Proof of Performance Testing shall be completed after APC subsystem installation for each vehicle.

2. Proof of Performance Testing shall use the complete configuration for the APC subsystem installed on each single vehicle, at the vehicle installation facility provided to the Contractor by the Yakima Transit.

3. The installed vehicle configuration shall include at minimum the following components: (1) doorway sensors installed and calibrated in all doorway passages; (2) integration of the doorway sensors with the installed APC controller and MDT (or directly with the MDT), to allow the boarding and alighting counts for test passages through each doorway to be reviewed; and (3) integration with the doorway closure sensors.

G. Subsystem Integration Testing

1. Subsystem Integration Testing shall be completed after the APC subsystem has been integrated with the on-board and central systems.

2. Subsystem Integration Testing shall use the APC subsystem installed on all equipped vehicles, with the central system at Yakima Transit.

3. The installed test configuration shall include at minimum the following components: (1) integration of the doorway sensors (and any APC controller) with the MDT, based on the standard SAE J-1708/J-1587 or J-1939 VAN on the vehicles; and (2) integration with the cloud capabilities for bulk data exchange with vehicles and for performing post-processing and reporting for APC data.

10. **APC Back Office Reporting**

A. Functional Requirements

1) The passenger count information received from each vehicle must be used to generate reports for Yakima Transit. Yakima Transit prefers that this functionality reside within the CAD/AVL component and not a

separate APC data software module.

2) Contractors shall describe the reports available from the passenger count data and provide sample reports in the proposal.

3) At a minimum the following reports shall be available from the passenger count data:
   a. Count of passengers on and off at a specified stop by:
      i. Time of day
      ii. Day of week
      iii. Specific day, week, month, or year
   b. Ridership by:
      i. Route
      ii. Trip
      iii. Day of Week
      iv. Specific day, week, month, or year

4) An option should be included to allow users to adjust the APC counts in the database if erroneous data is detected by the user.

11. Passenger Wi-Fi Hotspots

A. Functional Requirements

1) The proposed system shall include a Wi-Fi hotspot to provide passengers with Internet service for the duration of their trip.

2) The Wi-Fi device must work with Yakima Transit's current cellular provider – Verizon Wireless.

3) Yakima Transit should be able to configure the Wi-Fi hotspot with regards to the following:
   a. Content blocking.
   b. Time limits for users.
   c. Timeout period for inactivity.
   d. Bandwidth throttling to ensure primary on-board systems have adequate bandwidth.

12. Passenger Information Systems

A. Passenger Information Portal (Website / Mobil App) Functional Requirements

1) The Passenger Information Portal is defined as a website and/or mobile application that allows passengers to get real-time bus information, departure times and bus locations on either a desktop PC or mobile device such as a tablet or smartphone.

2) Passenger Information Portal must utilize the latest in responsive website design that can automatically accommodate various screen sizes ranging from smartphones, to tablets to desktop PCs.

3) Passenger Information Portal must be allowed to integrate with Yakima Transit website (www.yakimatransit.org) to allow users to access the portal from Yakima Transit website.

4) Passengers must be able to access real-time bus schedule information on the portal including map views, an integrated trip planner, and static schedule information for their chosen route(s). Bus location positions (icons) should update without the need for refreshing.

5) The Passenger Information Portal must provide Riders with access to Yakima Transit's posted schedule. Users should be able to select a day in the future and have the system display the standard, posted departure times for the route specified.

6) The passenger information system must actively receive static route, schedule, and stop information from the scheduling/CAD/AVL system so that changes to route locations, stop locations, and bus schedule times are automatically propagated to the passenger information system without administrator involvement.

7) Passengers must also be able to see the real-time position of buses on temporary route segments that were created in the scheduling/CAD/AVL system for detours or service interruptions.

8) Users must be able to click on the transit map and see the location of all vehicles currently on the selected route (or routes) in real-time, and the direction they are traveling. Users must have the ability to select one, some, or all routes on the map that they wish shown, and each route should be drawn in a separate color.

9) The user must be able to click their mouse pointer on any bus and see its route identifier, bus #, and arrival information for that vehicle's next few stops. ETAs to the next few (configurable) down-line stops should be displayed. If the bus is equipped with APCs the bus information should also include the current passenger load of that bus.

10) Hovering the mouse pointer over any bus stop must return the next few buses to arrive through the stop. Shared stops (those on multiple routes) should be clearly shown as such. ETAs must be provided for each bus enroute to that bus stop (e.g.: if two buses are on their way to a bus stop, there shall be two arrival time predictions).

B. Subscription Alerts and Notifications Functional Requirements

1) Passengers must have the ability to sign up for a user account in order to configure and receive transit bulletins, or departure alerts for stops and routes they are interested in.

2) Passengers who sign up for a rider information account must be able to receive automatic transit bulletins and notifications for the specific routes they wish.

3) Once created, passengers should be able to easily log into their account using their existing Facebook or Google accounts.

4) Passengers must be able to choose to have their notifications delivered via SMS text message, voice call (with optional IVR), or email.

5) Passengers must be able to configure their notifications to be a single use, or a recurring alert for their daily commute

C. SMS Real-Time Information - Functional Requirements

1) Passengers must be able to text message Yakima Transit using a designated five or six digit SMS short code.

2) Once the bus stop code and route number is texted to the designated number, the system must automatically return the route departure times of the next 3 buses leaving that stop, using real-time information for those buses within the prediction window, and scheduled times for those buses outside the real-time window.

3) SMS users should be able to get up to the minute information quickly without needing to repeatedly text the route number and stop code.

D. Integrated Trip Planner Functional Requirements

1) The Passenger Information Portal must include an integrated Trip Planner. Passengers must be able to enter a starting location, ending location, as well as departure or arrival days and times then the Trip Planner will return transit trip options available to the rider and highlight their route on a map. When entering starting/ending locations, the system should not require the user to know the exact address, but be able to provide a list of closest matches based on a descriptive name (e.g. YVC, Walmart, etc.). User should be able to save their favorite locations, routes or stops.

E. Portal Administration Functional Requirements

1) Authorized Yakima Transit administrators shall have access to the passenger information portal configuration settings. Portal configuration settings must allow the administrator to specify:
   a. Display units (i.e. standard or metric)
   b. How many bus stop times (1-4) will be shown
   c. Country restrictions for location searches
   d. Define default location when a user's smartphone has its geolocation disabled
   e. Real-time information refresh rates

2) The Administrator shall be able to configure how the portal will be displayed, and at a minimum provide the ability to:
   a. Import logos to be displayed on the browser header
   b. Import icons to be displayed when users add the webpage link to their mobile device home screen.
   c. Specify footer content
   d. Specify colors for visual elements on the web page (e.g. text, background color, button color)
   e. Specify if display patterns, real-time bus capacity and traffic layers are to be shown.

3) Administrators shall be able to configure and select display icons for up to five additional navigation menu links that can be used to open an external page or custom page.

4) Administrators shall have the ability to enable the SMS function and configure settings in such areas as, provider details, response length and timeout duration.

5) An optional IVR function should be available complete with the ability to configure voice and language selection, and maximum route and bus time announcements. Administrators shall be able to manage the messages users will hear.

6) Google Analytics - System must support the ability to track website usage, trends and all other information collected by Google Analytics.

7) A tool must be provided that allows Yakima Transit to export schedule data in the general transit feed format (GTFS) for integration with Google's Trip Planning web site, as well as 3rd-party developers who adhere to the GTFS format.
   a. The export function must include a validator to ensure the data is compliant with current GTFS format standards.

F. Real-Time Informational Signs (Optional) Functional Requirements

1) Passenger information system shall provide real-time bus arrival information through the use of signage system.
   a. The signs shall be installed at the Agency transit center.

2) Information on the signs must be fully integrated and in coordination with the other Passenger Information Systems (website, mobile app, etc.) using information from the on-board CAD/AVL system.

3) The signs shall be in compliance with the Americans with Disabilities Act (ADA).

4) The system shall include predictions about arrival times, as well as information about the nature and causes of disruptions. Signs shall meet indoor and outdoor illumination standards and be in weatherproof casing and have internal temperature and humidity control.

5) The signs shall be capable of displaying the destination of the route, route name, and estimated arrival times. These signs shall also be capable of displaying the current time, and a text message entered by a dispatcher or system administrator on one line, in case of emergency or an unforeseen event.

13. Computer Aided Dispatching (CAD) Software System

   A. Vehicle and Driver Management Functional Requirements

   1) Agency staff will dispatch the fixed route vehicles from a central office using this software solution. They must have the ability to:
      a. View all the transit Agency work for a specific day. The work can be viewed in a calendar and table view.
      b. View work assignments for drivers for a specific day
      c. Assign and re-assign work to employees: By using drag and drop functionality, the dispatcher can assign and re-assign work to any employee.
      d. Split and re-assign work to an employee
      e. Modify or cancel work
      f. View when drivers are absent
      g. View in real time the work that has been completed (and still needs to be completed)
      h. The system should provide an alert for the User if there is any unassigned work.

   2) User will be able to perform assignment functions on behalf of the driver (log on/off, pull in/out, stopping an assignment).

   3) User can allow a vehicle to become non-schedule or non-route adherent. This is available for the entire route or just a segment of the route and for a given duration (pattern detours).

   4) View vehicle details including make, model, year, VIN, license plate, and notes.

   5) A vehicle list must be available that allows the user to:
      a. View the status of a vehicle (logged on, logged off, pulled out, on assignment)
      b. Determine who is logged on that vehicle
      c. View the route the vehicle is on
      d. Determine the schedule and route adherence

   6) Users must be able to manage vehicle peripheral equipment integration, such as the ability to add pattern point actions to waypoints and bus stops to trigger annunciators and on board signs.

   7) An employee list must be available that allows the user to:
      a. View the status of an employee (logged on, logged off, pulled out, on assignment)
      b. Determine the vehicle the employee is driving
      c. View the route the vehicle is on
      d. Determine the schedule and route adherence

   8) Users must have the ability to manage employee absences (vacation, sick days, personal leaves, etc.). If work has been assigned to an employee during the period they have been marked absent, the system will automatically un-assign that work.

14. Event Management

   A. Functional Requirements

   1) The System must support the creation of events which can be tracked and managed by Dispatch when they occur.

   2) As a minimum, the system must support the following types of automatically generated system events:
      a. Emergency Button Broken
      b. Geofence Entry
      c. Idling
      d. Passenger Volume
      e. Silent Alarm

     f. Speeding
     g. Vehicle Off Route
     h. Vehicle Running Early
     i. Vehicle Running Late
     j. Unauthorized Vehicle Movement
     k. Yard Alarm
     l. Work started early/late

3) In addition to system events, other users must be able to create an event, such as Dispatchers and driver/operators via their in-vehicle MDT.

4) Events must be able to be assigned to a specific dispatcher and be modified, resolved and closed by a dispatcher. All transactions done on the event must be logged.

5) During system setup Yakima Transit should have the ability to configure events in a number of ways, including:
  a. Includes type, color coded priorities, description, notes, and open/close/clear statuses
  b. The foreground, background and bold attributes of an event will be configurable and change based on an event's current information (including status, priority, and event type)
  c. Configurable parameters must include time to hold event on screen after being closed and last xx hours of events to be loaded when application runs
  d. Configuration support must be included for emailing internal staff or managers when an event occurs.
  e. Display different events to different groups of users (supervisors, dispatchers, etc.)

6) When an event occurs the Dispatcher obtain details on the event by locating the event and/or vehicle through right click menu options on the event and following the vehicle on the map.

7) A Silent alarm on a vehicle must be supported as a priority event. When a vehicle sends in a silent alarm Dispatch must acknowledge or clear the alarm and the event status will be modified accordingly.

15. Text Messaging

A. Functional Requirements

1) The system must be able to support sending text messaging to/from the MDT on a vehicle, group of vehicles, or all vehicles.

2) Messages can be sent from the dispatcher to MDTs or to other dispatchers.

3) Message can be configured to require accept/reject, yes/no, numeric or acknowledged responses.

4) Free form text messages must be supported between dispatchers and to vehicle MDTs.

5) Messages on the dispatch application should be grouped by conversation.

6) Dispatcher must be able to receive canned messages back from vehicle MDTs.

7) Dispatcher should be able to locate vehicle/driver who sent a text message.

16. Transfer Protection

A. Functional Requirements

1) The system must allow for one bus to send a transfer request to a second bus, instructing the second bus to hold for a defined amount of time (at a particular stop) to ensure a passenger transfer between the two buses takes place.

17. **Vehicle History**

    A. Functional Requirements

        1) Dispatchers must be able to select a group of vehicles, a time range (start and stop time), a specified bus stop or set of stops, a specific map area, or individual drivers or a group of drivers. The system must then collect all vehicle location reports for the specified vehicle and time, color code the location reports based on route and schedule adherence and then display them on a map. Each vehicle's location reported on the map should include the date/time, vehicle speed and direction of travel. In addition, the ability to toggle status information such as schedule and route adherence must be available.

        2) The system must include the ability to save and retrieve playback files for later use.

18. **Route Monitoring**

    A. Functional Requirements

        1) The Dispatch software must provide a convenient way for users to quickly look at many routes and determine overall vehicle spacing (headway) and schedule adherence. The following functionality is required with this tool:
            a. Show a route bar for each direction defined for a given route (if multiple directions are defined in a route's schedule).
            b. Layer each pattern (for a given direction) on to the same route bar.
            c. Time points for all patterns (for a given direction) must be evenly distributed along the route bar.
            d. Provide arrows at the start of a route bar to show the next pending blocks (up to 3) to travel along the indicated route bar within the next hour.
            e. Hovering the mouse over a pending block should reveal additional details, such as the scheduled start time, vehicle ID, and employee's name.
            f. Hovering the mouse over a vehicle should reveal details such as the current driver, current vehicle ID performing the work, schedule adherence, and the time points associated with the vehicle.
            g. Users should have the same functionality available to them that is available on the map when right clicking on a vehicle (e.g. Locate, follow, etc.).
            h. Individual users should be able to make their own route color coding and sorting preferences and have them stored in the application for their next use.
            i. Headway alerts should appear in the route monitor window to alert dispatchers of bunching issues.

19. **Scheduling Software – Route Definitions**

    A. Functional Requirements

        1) The system must provide a way to manage Yakima Transit's bus stops:
            a. Bus Stop Importer: It must be possible to import a list of bus stops using a CSV file.
            b. Where Bus Stop data is not available to be imported, or to create new bus stops, it should be possible to click on the desired location on the map to create one. The address and latitude and longitude of the new stop should be automatically geo-coded and displayed.
            c. System must support entry of timepoint locations, stop locations, trip patterns, running times.
            d. System must support the import and/or creation of actions associated with approaching and departing from bus stops (e.g. annunciations, Next Stop sign announcement changes).

        2) The system must provide a way to manage Yakima Transit's service types:
            e. Define different types of service (regular service, holiday service, etc.).

> f. Define different patterns for these services (weekday, weekend, etc.).
>
> g. Define on which dates you will apply which type of service.

3) The system must provide a way to perform route and pattern management:

> h. Route and Pattern maintenance functionality should include a map for visual representation of routes and ease of creation.
>
> i. Manual Pattern Maintenance – Users must have the ability to:
>
>> i. Create new routes and update exiting routes
>>
>> ii. Create new patterns and update existing patterns, including time points and stops
>>
>> iii. Assign multiple patterns to a single route
>>
>> iv. Assign pattern run time and running time exceptions
>>
>> v. Color code patterns
>>
>> vi. Route line color, route line thickness, stop color, stop shape, and stop size should be configurable
>>
>> vii. View pattern statistics, including distance, drive time, hold time, number of time points and stops and locations of action-point triggers.
>>
>> viii. View a pattern's route adherence corridor on a map and be able to modify it for each stop
>>
>> ix. View pattern statistics, including distance, drive time, hold time, number of time points and stops

20. On-Board Equipment Management

A. Functional Requirements

1) Users must be able to:

> a. Automatically import triggers associated with pattern and block item types (e.g. annunciations, Next Stop sign announcement changes).
>
> b. Associate annunciator messages to time points, stops, start and end tasks.
>
> c. Associate annunciator messages to specific times of day or a specific interval (e.g. to be played every hour).
>
> d. Associate selected other peripheral messages and commands to time points and stops, start and end tasks.

21. Interlining Schedules

A. Functional Requirements

1) Users should be able to interline routes and have them display vehicle locations on the correct route on the AVL map. Schedule and route information must be pushed out to the vehicles so that the MDT will control any connected equipment appropriately, even on interlined routes.

> a. Connected peripheral equipment on the vehicles such as headsigns, fareboxes and annunciators should automatically switch to the appropriate actions for the new route based on vehicle location and work assignment, without operator intervention.

22. Scheduling Software Optional Features

1) Trip Generation

> a. Runcutting
>
> b. Blocking

2) Rostering
- c. Create and maintain rosters
- d. Associate drivers to rosters
- e. Manage employee vacation and sick days

3) Schedule Publishing
- f. Schedule Generation
- g. Schedule Validation
- h. Emergency Schedules

4) Service Interruptions
- i. Detour Management
  - i. Emergency Detours (Short Term)
  - ii. Extended Detours (Long Term)

23. Project Implementation, Training and Documentation

A. Project Management Functional Requirements

1) A project manager must be assigned for the duration of the project. A new project manager may only be assigned with the approval of Yakima Transit.

2) The project manager should organize weekly conference calls to discuss the project progress, scheduling moving forward, and responsibilities.
- a. An agenda must be provided prior to each call.
- b. Meeting minutes must be provided following each call.

3) The project manager must provide an implementation plan that details the work to be completed and the parties responsible for each task.
- c. Please include a sample implementation plan in your response.

4) The project manager must provide and maintain a project schedule in a Gantt chart format.
- d. Please include a sample project schedule in your response.

B. Implementation Phases

The project will be implemented in a phased approach with milestones for each phase. Yakima Transit feels that a phased approach is essential to the successful implementation of an ITS system.

1) Design Review

2) Functional Acceptance Testing

3) Pilot Program

4) Rollout

C. Design Review Phase – Functional Requirements

1) A System Design Review shall be undertaken prior to taking delivery of System components. The Contractor shall review and document all Project Specifications and ensure that the goals of the RFP are met in the specification.

2) Yakima Transit and Contractor shall agree to the Project Specification prior to the Contractor commencing System Implementation.

3) Part of the Design Review will include an onsite visit from the Contractor, for a project review/kickoff meeting, site surveys and vehicle inspections.

D. Functional Acceptance Testing Phase

1) Contractor will perform an onsite Functional Acceptance Test of the System.

2) The Functional Acceptance Test Phase (FAT) will be an end-to-end test of the System using one fully installed vehicle in a controlled testing environment.

3) The Functional Acceptance Test will prove that the hardware and software provided (including customizations) meet the System Specifications of the project.

4) Testing of the end-to-end system shall be conducted prior to going 'live' with any portion of the system. Test cases and documentation shall be developed to prove out all system components identified in the Design Review. The Contractor will develop all test cases and Yakima Transit and Contractor shall agree to the testing requirements prior to proceeding with testing.

5) Any issues that are identified with the System during the FAT will either be addressed immediately or with a resolution plan acceptable to Yakima Transit and the Contractor. At the conclusion of the FAT, Yakima Transit and the Contactor shall be confident that the System meets the requirements of the project and that any identified issues will be addressed to ensure the Pilot Phase is successful.

6) Contractor shall include a Functional Acceptance Testing proposal outlining philosophy, scope and resolution procedures, and account for the FAT as proposed in the Schedule Proposal above.

E. Pilot Program Phase Functional Requirements

1) The Contractor will perform an onsite pilot test of the system.

2) The Pilot test will be a live system test using a subset of the entire fleet (approx. 5-10% of fleet). The Pilot will complete end-to-end testing of the system under real-life working conditions so that any potential issues may be identified and addressed. Pilot testing shall be undertaken prior to full System rollout.

3) A resolution plan must be developed by the Contractor and approved by Yakima Transit for all issues identified in the Pilot.

F. Rollout Phase Functional Requirements

1) After the successful Pilot phase, the remainder of the System Equipment shall be provided and installed. Vehicles shall be added to the live system as installations are completed.

2) Contractor shall continue to provide comprehensive support for the System during this phase.

G. System Training Functional Requirements

1) The Contractor must provide onsite personnel to perform the following training:
   a. Training must be provided in a manner that allows Yakima Transit to operate and maintain the system.
   b. The Contractor's project manager must work closely with Yakima Transit's project coordinators to ensure that all training and schedules coincide properly with system implementation activities and staff availability.

2) The Contractor must provide a soft copy of the original training workbook, suitable for copying, and written permission for Yakima Transit to make as many copies as necessary to train personnel and operate the system.

3) The Contractor needs to provide comprehensive training to:
   a. Dispatchers
   b. Schedulers
   c. System Administrators
   d. Bus Operators (train the trainer approach preferred)
   e. Management Staff
   f. Maintenance Personnel

4) Contractor should provide a training overview for each group listed above as part of this RFP response that includes:
   a. Description
   b. Audience
   c. Format
   d. Equipment Required
   e. Prerequisite Knowledge
   f. Outline
   g. Duration
   h. Proficiency
   i. Timeline
   j. Listing of Documentation Provided

5) Online training must be available in the forms of webinars, videos and documentation.

H. System Documentation Functional Requirements

1) The Contractor must provide the customer with documentation pertaining to the System. This documentation should include at a minimum:
   a. General Information.
   b. All documentation must be in English and reflect the most up-to-date version of the software.
   c. Driver manuals must be built using Microsoft Word and must be customizable at the discretion of Yakima Transit.
   d. Contractor must provide any and all documentation supplied with standard commercial equipment, as well as any and all documentation provided by third party suppliers.

2) Documentation
   a. Printed CAD/AVL Manuals, Training Manuals, Driver Manuals, and Functional Overviews must be provided. All documents should be available electronically from the Contractor.
   b. A comprehensive system binder for installation and maintenance must be included with the project that covers all aspects of the system and troubleshooting methods. Two copies need to be provided for maintenance personnel for on-going support. The system binder must include;
      i. System maintenance guide
      ii. Software application notes
      iii. Copy of all relevant software required from Contractor & back up procedures
      iv. Descriptions and schematics of cabling and mounting

3) Context-sensitive online help system must be available to provide immediate assistance as dispatcher, schedulers and administrators need help. This online help should be available for the dispatch, administration and schedule modules of the software.

4) In instances of software upgrades and/or enhancements, relevant documentation must be provided or made available electronically.

I. Warranty and Support

1) The Contractor shall provide Yakima Transit with a warranty schedule detailing the coverage for hardware defects and faults due to improper installation.

2) The Contractor should provide at a minimum the following System Support:
   a. 24x7 coverage for system critical issues.
   b. Regular business hour support for minor issues.
   c. Free software updates as they become available for proposed applications.
   d. Responsive support must be provided to requests that come through phone, fax, e-mail and a customer Website.
   e. Assessment process for escalating issues to the appropriate severity level.
   f. Contractor should indicate their standard warranty terms and conditions.

J. Quantity of Systems

1) Provides for Yakima Transit an initial order of twenty-four (24) systems. Future orders will have a minimum quantity of one (1).

2) Deliveries will be scheduled by placing orders directly with the Contractor; and

3) Does not bind Yakima Transit to order more than the guaranteed initial order of twenty-four (24) systems during the term of the contract; and

4) Binds the Contractor to provide an initial order of twenty-four (24) and up to a total of thirty (30) systems over a possible five (5) year period form the signing date of the contract.

K. System Installation and Planning

1) Contractor will work with Yakima Transit on the location of equipment.

2) Contractor shall provide installation, documentation, maintenance and user training selected staff.

3) Contractor shall conduct final acceptance testing as deemed satisfactory by the Yakima Transit staff.

4) Working hours for this project are 7 AM – 8 PM daily, subject to change.

5) Yakima Transit will provide adequate space for the Contractor to setup and store equipment.

6) Contractor will provide Yakima Transit with serial numbers of the equipment installed in each bus.

7) Yakima Transit will work with agency to establish buses being held for downtime.

VI. COST PROPOSAL

1. General Instructions for Preparing Cost Proposals

Proposer must submit a cost proposal under Tab 8 of their proposal. If proposer agrees to allow other governmental agencies to purchase goods or services from the awarded Contractor under the resulting contract, price accordingly so other jurisdictions can perform an apples-to-apples comparison for their resulting contract.

2. **Total Project Cost**

    Proposer must provide a total project cost to include all requisite services, materials, work products and ancillary expenses.

    Contractor and any subcontractors' travel expenses (e.g. airfare, lodging, and meals, insurance) and other miscellaneous expenses related to the provision of on-site services **must** be included in the proposed cost and cannot be an additional charge. Rates may not exceed the current Washington Department of Administration published per diem rates which can be viewed at: https://ofm.wa.gov/accounting/administrative-accounting-resources/travel/diem-rate-tables.

    Contractor's expenses related to providing on-site services (e.g. computer, printer, miscellaneous equipment) must be included in the proposed cost and cannot be at an additional charge.

    Owner will coordinate and provide any requisite meeting space for on-site services.

3. **Pricing and Discount**

    The Owner qualifies for governmental discounts. Unit prices shall reflect these discounts. Unit prices shown on the proposal or contract shall be the price per unit of sale (e.g., hour, ea.) as stated on the request or contract. For any given item, the quantity multiplied by the unit price shall establish the extended price, the unit price shall govern in the proposal evaluation and contract administration.

4. **Price Clarifications**

    The Owner reserves the right to clarify any pricing discrepancies related to assumptions on the part of the Proposers. Such clarifications will be solely to provide consistent assumptions from which an accurate cost comparison can be achieved.

    Must provide pricing for all five tasks. Use Cost Proposal Form as a guide for pricing proposals and include rates for consulting hourly rates for additional consulting if Yakima Transit requires.

5. **Price Increases**

    Pricing shall be prepared with the following terms. The Purchasing Manager may exempt these requirements for extraordinary conditions that could not have been known by either party at the time of bid or other circumstances beyond the control of both parties, as determined in the opinion of the Purchasing Manager. Prices shall remain firm for the first twelve (12) month period of the contract.

    Requests for Rate Increases must be delivered to the Buyer listed on Page 2, in accordance with the rules below. No other employee may accept a rate increase request on behalf of the City. Any invoice that is sent to the City with pricing above that specified by the City in writing within this Contract or specified within an official written change issued by Purchasing to this contract, shall be invalid. Payment of an erroneous invoice does not constitute acceptance of the erroneous pricing, and the City would seek reimbursement of the overpayment or would withhold such overpayment from future invoices.

    A. Discount from Manufacturer List Pricing: For all contract items that are priced as a discount below Manufacturer List prices, there shall be no changes to the discount rate throughout the life of the contract. As manufacturer list prices change, the net price to the City will automatically change in the same percentage as the discount rate to the City.

    B. Fixed Product Pricing: For product and supply contracts that provide on-going, multiple year supply. Original pricing shall be fixed and firm for the first year of the contract.

    Price requests are at the discretion of the Purchasing Manager; and must also be:

a. The direct result of increases at the manufacturer's level (or if Bidder is a supplier of a raw material delivered directly to the City such as brass, the increase must be verified at the supplier level).

b. Incurred after contract commencement date.

c. Not produce a higher profit margin than that on the original contract.

d. Clearly identify the items impacted by the increase.

e. Be filed with Purchasing Manager a minimum of thirty (30) calendar days before the effective date of proposed increase.

f. Be accompanied by detailed documentation acceptable to the Purchasing Manager sufficient to warrant the increase.

g. Should not deviate from the original contract pricing scheme/methodology.

The United States published indices such as the Producer Price Index or other government data may be referenced to help substantiate the Contractor's documentation. The PPI Commodity Data is available at https://www.bls.gov/ppi/detailed-report/home.htm#2021.

The adjustment (if any) shall remain firm and fixed for at least 365 days after the effective date of the adjustment.

COST PROPOSAL FORM
RFP #12324P
Onboard Integrated Technology System for Yakima Transit

The CONTRACTOR, in accordance with the RFP Specifications for providing an Onboard Information Technology System has carefully examined the project requirements, and the scope of the proposed work, and being familiar with all the conditions surrounding the project, hereby proposed to perform all work required for the amount listed below:

Itemized Project Pricing				Quantity of buses	Total
	1. Hardware Per Bus	$_____	X	24	$_____
	2. Software License	$_____	X	24	$_____
	3. Installation Cost	$_____	X	24	$_____
	4. Travel Costs	$_____	X	1	$_____
	5. One Year Software & Support Fee	$_____	X	1	$_____
Total Project Cost					**$_____**
Optional Units	1. Hardware Per Bus	$_____	X	1	$_____
(Up to 30)	2. Software License	$_____	X	1	$_____
	3. Installation Cost	$_____	X	1	$_____
	4. Travel Costs	$_____	X	1	$_____
	5. One Year Software & Support Fee	$_____	X	1	$_____
	6. **Optional** - Real Time Informational Signs	$_____	X	1	$_____
Software & Support	1. Year 2 Software License & Support Fee	$_____	X	1	$_____
	2. Years 3 Software License & Support Fee	$_____	X	1	$_____
	3. Years 4 Software License & Support Fee	$_____	X	1	$_____
	4. Years 5 Software License & Support Fee	$_____	X	1	$_____
Total					**$_____**

COST PROPOSAL FORM PG 2 OF 2

Hourly Rates for Offsite Services	Hourly Rate
Offsite / Remote - Program Manager	$_____
Offsite / Remote - Technical Specialist	$_____
Offsite / Remote - Other _____	$_____

On-Site Rate - The "blended hourly rate" for post-installation services shall be a single hourly rate encompassing all personnel classifications that may be required for completion of any given post-installation task under the resulting contract. This blended hourly rate shall be a fully loaded rate to include, but not be limited to, all salary, benefits, overhead, profit, and local travel costs (defined as travel within Yakima County, WA). $_____

Provide a separate quote for one year of software assurance based on a five (5) year contract, billable on a yearly basis and submit with Cost Proposal Form under <u>Tab 8</u>.

VII. EVALUATION AND CONTRACT AWARD

1. Preliminary Evaluation

All Proposals shall be evaluated against the same standards. The Proposals will first be reviewed to determine if they contain the required forms, follow the submittal instructions and meet all mandatory requirements. Failure to meet mandatory requirements will result in proposal rejection as non-responsive. In the event that NO Proposer meets specified requirement(s), the Owner reserves the right to continue the evaluation of the proposals and to select the proposal most closely meeting the requirements specified in this RFP, or not select any proposals.

2. Proposer Presentations/Scoring

Based on evaluation of the written proposals by the Evaluation Team on the stated criteria, an estimate of two to four top scoring proposals may be short-listed. Short-listed Proposers may be required to participate in interviews and/or site visits to support and clarify their Proposals if requested by the Evaluation Team. The Evaluation Team will make every reasonable attempt to schedule each presentation at a time and location agreeable to the Proposer. Failure of a Proposer to interview or permit a site visit on the date scheduled may result in rejection of the Proposer's Proposal.

Should the Evaluation Team request any oral presentations or demonstrations from one or more of the short-listed proposers, the Evaluation Team will review the initial scoring and make adjustments based on the information obtained in the oral presentation or demonstration and site visits and to determine final scoring.

3. Evaluation Criteria

The proposals will be scored using the following criteria:

#	Description	Max Points
1	General Requirements	20
2	Technical Requirements	60
3	Cost	20
	TOTAL POSSIBLE POINTS	**100**

The cost proposal section shall receive a weighted score, based upon the ratio of the lowest proposal to the highest proposal. The lowest cost Proposal will receive the maximum number of points available for the cost category and other proposals will be scored accordingly.

Results of reference checks will be used to clarify and substantiate information in the written proposals. The reference results shall then be considered when scoring the responses to the requirements in the RFP.

The points stated above are the maximum amount awarded for each category. The evaluation process is designed to recommend award of this procurement to the proposal that is the best value of the Owner, not necessarily the lowest cost Proposal.

4. RFP Evaluation

Evaluation of proposals shall be based on conformity to the specifications, cost, past experience and performance with the City and other agencies, manufacturers past performance with the City and other agencies, proposed manufacturer's service availability, parts availability, equipment design and functionalism and effect on productivity and bidder's supporting documentation.

5. **Prompt Payment**

   Proposers are encouraged to offer a discount for prompt payment of invoice. Please indicate your discount proposal on page 2 of this document. If awarded by the City, period of entitlement begins only after:
   a. Receipt of a properly completed invoice
   b. Receipt of all supplies, equipment or services ordered
   c. Satisfactory completion of all contractual requirements

6. **Award / Best and Final Offers**

   The Buyer will compile the final scores for all sections of each responsive proposal. The award will be granted in one of two ways. The Evaluation Team's Recommendation of Award may be granted to the highest scoring responsive Proposal and responsible Proposer. Alternatively, Proposers with the highest scoring proposer or proposers may be requested to submit Best and Final Offers. If Best and Final Offers are requested by the Evaluation Team and submitted by the Proposer, they will be evaluated against the stated criteria, scored and ranked by the evaluation committee. The Intent to Negotiate then will be granted to the highest scoring Proposer. However, a Proposer should not expect that the Owner will request a Best and Final Offer.

7. **Tied Score**

   In case of a tied score, recommendation of award will go to the firm who was favored by the majority of the Evaluation Team members, according to their score. The Evaluation Team shall then offer an "Intent to Negotiate and/or Intent to Award" the final contract with the successful Proposer and the decision to accept the award and approve the resulting contract shall be final.

8. **Tax Revenues**

   RCW 39.30.040 allows the City to consider the tax revenue that is generated by a purchase of supplies, materials, and equipment, including those from a local sales tax or from a gross receipts business and occupation tax, it determining which bid proposal is the lowest, after the tax revenue has been considered.

9. **Offer in Effect for Ninety (90) Days**

   A Proposal may not be modified, withdrawn or canceled by the proposer for a ninety (90) day period following the deadline for proposal submission as defined in the Calendar of Events, or receipt of best and final offer, if required, and Proposer so agrees in submitting the proposal.

10. **Notification of Intent to Negotiate/Intent to Award**

    Proposers will be notified in writing of the Owner's Intent to Negotiate and/or Intent to Award the contract resulting from this RFP.

11. **Right to Reject Proposals and Negotiate Contract Terms**

    The Owner reserves the right to negotiate the terms of the contract, including the award amount, with the selected Proposer prior to entering into a contract. If substantial progress is not made in contract negotiations with the highest scoring Proposer, the Owner may choose to cancel the first Intent to Negotiate and commence negotiations with the next highest scoring Proposer.

12. **Single Proposal Process**

    If only a single proposal is received, the City may require that the Proposer provide verification of cost/price reasonableness, which may include but is not limited to: a cost analysis or a price comparison between the proposed price and that of similar items, materials, supplies, and/or services to confirm that the proposal

submitted price is fair and reasonable. If requested, the Proposer shall provide the cost analysis or price comparison within seven (7) calendar days of the date requested. The City reserves the right to reject or accept the proposal submitted on the basis of verification of price reasonableness.

13. Protest Procedure

Any protest must be made in writing, signed by the protestor, and state that the Proposer is submitting a formal protest. The protest shall be filed with the City of Yakima Purchasing Manager at 129 No. 2nd St., Yakima, WA 98901, or by fax: 509-576-6394 or email to: Maria.Mayhue@yakimawa.gov. The protest shall clearly state the specific factual and legal ground(s) for the protest, and a description of the relief or corrective action being requested. Protests based on specifications/scope of work, or other terms in the RFP shall be filed at least five (5) calendar days before the solicitations due date, and protests based on award or after the award shall be filed no more than five calendar (5) days after Award Announcement (see below for details). The following steps shall be taken in an attempt to resolve the protest with the Proposer:

Step I. Purchasing Manager and Division Manager of solicitation try resolving matter with protester. All available facts will be considered and the Purchasing Manager shall issue a written decision.

Step II. If unresolved, within three (3) business days after receipt of written decision, the protest may be appealed to the Department Head by the Purchasing Manager.

Step III. If still unresolved, within three (3) business days after receipt of appeal, the protest may be appealed to the Executive (or his designee). The Executive shall make a final determination in writing to the Protester.

Award Announcement
Purchasing shall announce the successful Proposer via Website, e-mail, fax, regular mail, or by any other appropriate means. Once the Intent to Negotiate is released by Purchasing, the protest time frame begins. The timeframe is not based upon when the Proposer received the information, but rather when the announcement is issued by Purchasing.

Award Regardless of Protest
When a written protest against making an award is received, the award shall not be made until the matter is resolved, unless the Owner determines that one of the following applies:
- The supplies or services to be contracted for are urgently required;
- Delivery or performance will be unduly delayed by failure to make award promptly;
- A prompt award will otherwise be advantageous to the Owner.

If the award is made, regardless of a protest, the award must be documented in the file, explaining the basis for the award. Written notice of the decision to proceed shall be sent to the protester and others who may be concerned.

The Owner retains the right to enter into any contract and nothing herein shall be construed to limit that authority in any manner.

ATTACHMENT A

Fixed Route Vehicles

No.	Year	Make/Model	Vehicle Identification Number (VIN)	Agency Vehicle Number
1	2008	GILLIG 'LOW FLOOR' 35 FT	15GGB271581078050	ER7136
2	2009	GILLIG 'LOW FLOOR' 35 FT	15GGB271791078052	ER7138
3	2009	GILLIG 'LOW FLOOR' 35 FT	15GGB271991078053	ER7139
4	2010	GILLIG 'LOW FLOOR' 35 FT	15GGB2718A1178505	ER7160
5	2010	GILLIG 'LOW FLOOR' 35 FT	15GGB271XA1178506	ER7161
6	2010	GILLIG 'LOW FLOOR' 35 FT	15GGB2711A1178507	ER7162
7	2010	GILLIG 'LOW FLOOR' 35 FT	15GGB2713A1178508	ER7163
8	2010	GILLIG 'LOW FLOOR' 35 FT	15GGB2715A1178509	ER7164
9	2014	GILLIG 'LOW FLOOR' 35 FT	15GGB2717E1183166	ER7165
10	2014	GILLIG 'LOW FLOOR' 35 FT	15GGB2719E1183167	ER7166
11	2014	GILLIG 'LOW FLOOR' 35 FT	15GGB2710E1183168	ER7167
12	2016	GILLIG LOW FLOOR' 40 FT	15GGD2713G1186224	ER7168
13	2016	GILLIG LOW FLOOR' 40 FT	15GGD2715G1186225	ER7169
14	2016	GILLIG LOW FLOOR' 40 FT	15GGD2717G1186226	ER7170
15	2017	GILLIG 'LOW FLOOR' 35 FT	15GGB2715H1188869	ER7171
16	2017	GILLIG 'LOW FLOOR' 35 FT	15GGB2711H1188870	ER7172
17	2017	GILLIG 'LOW FLOOR' 35 FT	15GGB2713H1188871	ER7173
18	2017	GILLIG 'LOW FLOOR' 35 FT	15GGB2715H1188872	ER7174
19	2023	GILLIG 'LOW FLOOR' 35 FT	15GGB2716P3198040	ER7175
20	2023	GILLIG 'LOW FLOOR' 35 FT	15GGB2718P3198041	ER7176
21	2023	GILLIG 'LOW FLOOR' 35 FT	15GGB271XP3198042	ER7177
22	2023	GILLIG 'LOW FLOOR' 35 FT	15GGB2711P3198043	ER7178
23	2023	GILLIG 'LOW FLOOR' 35 FT	15GGB2713P3198044	ER7179
24	2023	GILLIG 'LOW FLOOR' 35 FT	15GGB2715P3198045	ER7180