

# Request for Proposal (RFP) for Fixed Wireless Access (FWA) System

**Issuing Company:** Inland Cellular, LLC

**RFP Number:** 2023\_ICMT01\_RAN-Core

## I. Introduction

Inland Cellular is pleased to issue this Request for Proposal (RFP, herein referenced as project **ICMT01**) for the implementation of a Fixed Wireless Access (FWA) system in the following areas (herein referenced as the “Service Area”): Cascade, Fergus, Flathead, Lake, Musselshell, Missoula, Glacier, Pondera, Rosebud, and Lincoln. The purpose of this project is to provide high-speed internet access to unserved & underserved areas in our community, and we are excited to be awarded funding through the ConnectMT grant program to make this project a reality.

Inland Cellular is committed to providing reliable and affordable broadband services to our customers. We recognize that access to high-speed internet is essential for education, healthcare, economic development, and social connectivity in today's world. Therefore, we are eager to partner with a qualified OEM/solutions integrator who shares our vision and can help us deliver this project on time and within our budget.

Through this RFP, we seek to identify an OEM/solutions integrator with the equipment, technical expertise, experience, and resources to help us build a state-of-the-art FWA system in accordance with the specifications and requirements outlined in this document. We invite all interested and qualified parties to submit a proposal that demonstrates their ability to meet our needs and goals.

We look forward to reviewing the proposals and working with the selected party/ies to deliver a successful project that will have a positive impact on our community.

## II. Scope of Work

The scope of this **ICMT01** project includes the procurement, installation, validation, and commissioning of a Fixed Wireless Access (FWA) system that provides high-speed internet access to unserved & underserved areas in the Service Area. The successful OEM/solutions integrator will be responsible for supplying all equipment and materials necessary for the deployment and provisioning of the proposed network.

The contract will provide or specify how it will optionally provide operational and installation training and assistance for the proposed solution.

The OEM/solutions integrator must also comply with all applicable safety regulations and

quality standards. The project must be completed within the agreed-upon timeline.

Additional details on the project scope are provided in Exhibit B and in Section III of this document.

### III. Technical Specifications

The Project will cover 1,002 road miles via terrestrial Fixed Wireless Access (FWA) to achieve internet speeds of at least 100 Mbps upload/100 Mbps download to 10,336 Residential, including 8,833 Housing Units, 869 Businesses, 30 Community Anchor Institutions in the Service Area in Cascade, Fergus, Flathead, Lake, Musselshell, Missoula, Glacier, Pondera, Rosebud and Lincoln. For the CPE the initial order must include 500 CPE units; and up to 3,500 additional units must be available for order.

**Technology Type and Network Design:** The proposal must include a FWA network capable of providing last-mile connectivity between the project fiber infrastructure and the target service locations and anchor institutions. All provided anchor institutions must be included in the proposed network design or the design will not be considered a complete application. If any additional information is needed about these requirements, please request clarification directly via email to the Project Manager.

**Access Speeds and Network Capacity:** The proposed solution must be capable of meeting or exceeding the technical requirements of 31 CFR Part 35 RIN 1505-AC77 regarding the American Rescue Plan Act (ARPA) Coronavirus State and Local Fiscal Recovery Funds (SLFRF). Specifically, proposed solutions must provide service that reliably meets or exceeds 100 Mbps download speed and between at least 20 Mbps and 100 Mbps upload speeds to each targeted service location, simultaneously, and be scalable to a minimum of 100 Mbps symmetrical for download and upload speeds to each targeted service location, simultaneously. Interpretations of this requirement must be consistent with prior rulings and clarifications released for the Rural Digital Opportunity Fund (RDOF), ARPA SLFRF, and Rural Development Broadband ReConnect Program (ReConnect) federal broadband subsidy programs.

**Access Latency:** The proposed solution must be capable of providing a *reliable* connection, as specified in the American Rescue Plan Act (ARPA) Coronavirus State and Local Fiscal Recovery Funds (SLFRF). Service latency, jitter, or deterioration of existing connections during peak traffic hours are all considered when making the determination that the service provided is reasonable. Interpretations of this requirement must be consistent with prior rulings and clarifications released for the Rural Digital Opportunity Fund (RDOF), ARPA SLFRF, and Rural Development Broadband ReConnect Program (ReConnect) federal broadband subsidy programs.

**Center Frequency:** Consistent with the ARPA SLFRF, the proposed solution must operate on licensed center frequencies on the Citizens Broadband Radio Service (CBRS) Band n48 and/or Band n41 with transmission parameters consistent with and certified to comply with all relevant federal regulatory requirements for those bands. The operational center frequency and maximum occupied bandwidth of the solution for each site may be different, with the specific required spectrum specified for each site in Exhibit D.

**CBRS Spectrum Access Service (SAS):** The proposed solution must include and provide configuration details for access to CBRS spectrum, including detailing the supported SAS providers and any other details relevant to provisioning, CBSD enablement, and access or

other associated fees.

**Occupied Bandwidth:** The proposed solution must provide service meeting the specified access speeds with a maximum of 40 MHz of occupied wireless channel bandwidth at each site.

**Power:** The proposed solution must be capable of operating from a standard, fused, 60 Hz single- or dual-phase 3-wire 120 VAC power source co-located with the tower. Solutions should consider both trunked 120 VAC power as well as trunked -48 VDC power options for any proposed powered equipment on the tower. All terminations must be connectorized for easy installation and service and must include provision for sufficient surge and lightning protection included in the solution.

**Fronthaul:** The proposed solution must specify armored, outdoor, UV-rated fiber cables for data connectivity between all exposed FWA components. All data terminations must be connectorized for easy installation and service and must include provision for sufficient surge and lightning protection included in the solution.

**Mounting Systems:** The proposed solution must be mountable to the provided list of tower infrastructure in Exhibit D and be flexible enough to be installed on standard pole-mount attachment hardware that must be specified in the proposal.

**Customer Premises Equipment (CPE):** The proposed solution must include specifications for a CPE as well as a budget. Applicants must provide a total loaded cost of an end-user installation – this may include additional installation equipment, cables, etc.

**Existing Network Core Integration:** The proposed solution must integrate with existing and future network management systems available to Inland Cellular to minimize cost and simplify management and configuration. This integration is accomplished by providing command, control, and user management via standard, open, and well-documented 3GPP interfaces. Specifically, the proposed solution must expose an NG-RAN interface for signaling between the network core and the proposed last-mile FWA solution adhering to the specifications of TS 38.412 v15.5.0 or later. This interface must implement, at a minimum, the N1, N2, and N3 interfaces as specified in TS 23.501 v15.13.0 or later and integrate with standard network core functions such as Access and Mobility Management Function (AMF) and User Plane Function (UPF).

**Other Management and Control Systems:** Equipment for the proposed solution, such as routers, switches, radio access network equipment, Consumer Premises Equipment (CPE, including any additional Wi-Fi routers or powering equipment), must include systems for provisioning, monitoring, and configuration while deployed when such management is not provided by the existing network core integration detailed above. Details for any associated management software or APIs, including available monitoring data, alarms, update rates, and any associated fees or costs, must be provided within the proposal.

## IV. Project Timeline

The project must be completed within 30 months of the performance period start, which is defined as the date when the first purchase order for this RFP is placed.

The following is an estimated project timeline:

- RFP Posted **July 20, 2023** open for 30 days.
- RFP Submission Deadline – **August 19, 2023 closes at 5:00pm MST/MDT**
- Contract Negotiation including pricing and payments terms for responding parties – From date of formal response to RFP until Selection Date
- Selection Date – August 26, 2023
- Performance period will be verification of solution for each deployed tower location rolling over the performance period. Please provide a suggested rollout as part of your bid.
- Delivery of ordered solutions to begin as early as Late October 2023.
- The total project duration (i.e., the total operational lifetime of the proposed solution) must be complete 30 months before the performance period start date. Applicants must make sure that this is reflected in their budget justification (Exhibit A) including any required deposits and all estimated delivery dates.

## **V. Proposal Requirements**

The following proposal requirements must be met in order to be considered for the contract:

### **Proposed Action Plan:**

Detail the proposed workflow for completing the project within the designated timeline. Include a timeline that outlines the key milestones and deadlines for each phase of the project. Identify the personnel who will be responsible for each phase of the project.

### **Detailed Budget Justification:**

Provide a detailed budget and pricing breakdown that includes all equipment, material and other costs related to successful completion of the project. Please note that the prices provided must cover the full cost of the equipment over the equipment's entire life cycle.

This must also include any subscriptions, intellectual property or software licensing, and all other fees required to implement the proposed solution. If service or support contracts are required to operate and maintain the proposed solution, the applicant must provide a clear and comprehensive schedule of fees related to these contracts. Use the provided Exhibit A BOM-Units Spreadsheet to detail the costs required for the project.

Identify any potential cost savings or efficiencies or rebates or other beneficial terms that may be realized during the project.

### **Technical Narrative:**

Provide a detailed description of the proposed FWA technology and the various components used to implement the solution. Include a discussion on the proposed system's total capacity along with supporting evidence in the form of link budgets, capacity calculations, coverage simulations, etc., that clearly show the proposed system is capable of meeting the technical specifications provided in the Technical Specifications RFP section. Furthermore, provide network coverage simulation results to support the proposed solution's ability to serve the entirety of the required geographic coverage area.

### **Qualifications and Experience:**

Provide information on the qualifications and experience of the key personnel who will be involved in the project, including project management, engineering, and field staff.

## **VI. Contractual Requirements**

The following contractual requirements must be met in order to receive funding through the ARPA grant agreement for the ConnectMT program in the state of Montana. All contractual requirements must also comply with applicable Federal and Montana Code Annotated 2021 regulations:

### **Performance Standards:**

- The OEM/solutions integrator must meet all performance standards outlined in the project final statement of work.
- The OEM/solutions integrator must ensure that all work is completed within the designated project timeline.
- The OEM/solutions integrator must ensure that all work is completed in compliance with all applicable safety regulations and industry standards.

### **Reporting and Documentation:**

- The OEM/solutions integrator must provide regular progress reports to the project manager throughout the duration of the project. Bi-weekly reporting is recommended.
- The OEM/solutions integrator must provide all necessary documentation, including product specifications, installation drawings, installation manuals, operational manuals, and troubleshooting manuals as required to install, operate, and maintain the proposed solution.

### **Change Management:**

- Any changes to the scope of the project work must be approved in writing by the project manager prior to implementation.
- Any changes to the project timeline must be approved in writing by the project manager prior to implementation.
- Any changes to the project budget must be approved in writing by the project manager prior to implementation.

### **Payment and Invoicing:**

- The OEM/solutions integrator must submit invoices in accordance with the payment schedule outlined in the contract.
- The OEM/solutions integrator must provide accurate and detailed invoices that clearly outline all work completed and materials used.
- Payment will be made by the Company within 30 days of receipt (NET30) of a properly submitted invoice unless otherwise agreed to by the parties.

### **Termination and Default:**

- The contract may be terminated by either party for cause with written notice.
- The OEM/solutions integrator may be considered in default if they fail to meet project performance standards, fail to comply with applicable regulations, or fail to complete the project within the designated timeline.
- In the event of termination or default, the project manager may pursue legal remedies as outlined in the contract.

### **Compliance:**

- The OEM/solutions integrator must comply with all applicable Federal and Montana Code Annotated 2021 regulations, including but not limited to labor laws, environmental

regulations, and safety standards.

- The OEM/solutions integrator must verify all necessary regulatory permits and approvals for installing and operating the proposed solution are included in the proposal timeline.
- All contractual requirements must be met in order to receive funding through the ARPA grant agreement for the ConnectMT program. The successful OEM/solutions integrator must ensure that all work is completed in accordance with the specifications outlined in this RFP and in compliance with all applicable regulations.
- The OEM/solutions integrator must complete the representation form in Exhibit C that the proposed solution does not include any covered telecommunications equipment as defined in FAR 52.204-26 and that the proposed solution meets the buy American provisions imposed by the ConnectMT award.

## VII. Evaluation and Award Process

Evaluation will begin as formal responses are made. Additionally, there will be a five business days evaluation period after the RFP deadline if needed by the company. Awards will be decided based on the following criteria and ICMT01 decision will be made by no later than the End of Business 5:00pm MST/MDT on **August 19, 2023**

Criteria	Points Score
Total network capacity (number of households)	20
Total coverage (percentage of service locations)	20
Infrastructure usage /3GPP standards compliance	20
Total project price	20
Technical and buildout feasibility	20
<b>Totals</b>	<b>100</b>

The review will be completed by a committee of 3 people to include the Program Officer, Project Manager, and a leadership staff member of the Company

## VIII. Contact Information

<b>Program Officer</b>	<b>Project Manager</b>
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<b>Name:</b> Nathan Weis	<b>Name:</b> Lowell Feldman
<b>Phone Number:</b> 512-200-4814	
<b>Email Address:</b> lowellfeldman@inlandcell.com	

## **IX. Disclaimers**

### **American Rescue Plan Act (ARPA) Disclaimer:**

This project is funded through the American Rescue Plan Act (ARPA). The recipient of these funds is responsible for compliance with all applicable ARPA requirements, including but not limited to reporting requirements and compliance with all applicable Federal and Montana Code Annotated 2021 regulations.

### **Termination of Contract:**

The grantor reserves the right to terminate the contract at any time if the recipient fails to comply with the terms and conditions of the contract, including but not limited to compliance with all applicable Federal and Montana Code Annotated 2021 regulations.

### **Liability and Indemnification:**

The recipient of these funds assumes all risks and liabilities associated with the project, including but not limited to property damage, personal injury, and third-party claims. The recipient agrees to indemnify, defend, and hold harmless the grantor, its officers, agents, and employees from and against any and all claims, damages, losses, liabilities, and expenses arising out of or in connection with the project.

### **Public Records:**

All documents and materials generated as part of the project are subject to public records laws and may be subject to disclosure under Montana Code Annotated 2021. The recipient of these funds agrees to comply with all applicable public records laws and to provide all requested documents and materials in a timely manner.

### **Governing Law:**

This contract shall be governed by and construed in accordance with the laws of the State of Montana, without giving effect to any choice of law or conflict of law provisions. Any legal action arising out of or in connection with this contract shall be brought in the courts of the State of Montana.

## **X. Conclusion**

We are committed to delivering a high-quality and reliable system that will meet the needs of the residents and businesses in the target areas and look forward to your submission.

## **XI. Submission Details**

Submission are being accepted electronically only. Allsubmissions must be submitted to the project manager email: [lowellfeldman@inlandcell.com](mailto:lowellfeldman@inlandcell.com)

Requests for additional information and/or to schedule any phone or virtual meetings you may do so by contacting the project email [lowellfeldman@inlandcell.com](mailto:lowellfeldman@inlandcell.com)

### **ENCLOSED:**

EXHIBIT A: BOM Units Spreadsheet

EXHIBIT B: **ICMT01** Project Service Area

EXHIBIT C: Representation 52.204-26 and Buy American Representation

EXHIBIT D: Tower Addendum