



First Step Internet
 PO BOX 9587
 Moscow, Idaho 83843
 Phone (208) 882-8869 Fax (208) 883-3733

Request for Quotation (RFQ)

NTIA / BTOP Project

First Step Internet, LLC is soliciting quotations for the networking and hardware components required to complete a large scale network build out. Vendors are encouraged to submit quotations for any or all of the listed components. **You do not have to bid on all items listed.** Based on bid submission, First Step Internet may select individual items or portions of selected bids. All submissions will be considered for all or partial award and should include line item pricing for each component. Please include shipping and handling estimate on quotation. All products will be delivered to First Step Internet in Moscow, ID.

Quotations will be evaluated based on the following criteria. Please provide any necessary language or documentation in addressing these points.

- Lowest overall cost
- Capability to perform (Purchasing Ability, Inventory, Manufacturer Relations)
- Project or equipment experience and support
- Qualifications/certifications
- Project approach/schedule/ shipping and delivery time table
- Locality of business / local economy impact (in relation to First Step Internet, Moscow, ID)
- Relationship/credibility/ reputation
- Forms of payment available (Specific Terms, NET, Credit Card)

Quotations may be submitted via email to bids@fsr.com, postal mail or fax. Please be sure to include contact information. Any questions can also be directed to bids@fsr.com or Tony Burt, tburt@fsr.com.

Item and Description	Qty
DELL PowerConnect 5424 (3 yr, NBD hardware warranty)	45
Mikrotik RB1100 w/ 2GB RAM	28
Mikrotik RB450g (include case and power supply)	71
DragonWave Horizon Compact (or equiv) incl. all antennas, surge, hardware, etc (see attached list)	22 links
Redline AN-80i (or equiv) incl. all antennas, surge, hardware, etc (see attached list)	47 links
Digital Logger's Web Power Switch II with AutoPing, Rack brackets and extended warranty	31
Cat 5E double shielded (foil, braid) double jacket, black, UV and oil resistant (1000' spool)	10
Bird Electronic SA-6000EX/1 (including N/F calibration component)	1
Fluke CableIQ with Service Kit (includes LinkRunner Pro, IntelliTone Pro 200, Remote IDs 1-6)	1
Fluke MicroScanner2 Pro Kit	2
Wi-Spy DBx with Chanalyzer Pro Software Bundle	3

Tower Locations

Below are the tower locations for new towers that are being installed. Tower heights are given for each location. For locations including our anchor institutions, which do not have a tower listed, a reasonable height may be assumed. (ie 1.5 stories or 20')

Tower #	Location	Latitude	Longitude	Height
1	West Twin	46.811	-116.914	100'
2	Paradise Ridge	46.679	-116.974	100'
3	Lewiston Hill	46.459	-117.031	100'
4	Potato (Spud) Hill	46.815	-116.559	50'
5	Winchester Grade	46.329	-116.634	100'
6	Grangeville Tower	45.863	-116.124	100'
7	Kamiah	46.1933	-116.0524	50'
8	Elk City #1 (FOC)	45.826	-115.436	50'
9	Elk City #2 (HS)	45.828	-115.435	50'
10	Elk City #3 (Howzen)	45.823	-115.445	50'

DragonWave Horizon Compact Links (or equivalent)

First Step is seeking quotations on 22 complete licensed frequency radio links including all mounting hardware, antennas, power supplies, surge protectors, etc. Upgrade keys and antennas should be included for 200Mbps of throughput. Please include the 3 year Global Warranty. Tower heights are given for each location. Line of Sight has been verified for each link. Please refer to the Tower Location chart above for reference.

Start Latitude	Start Longitude	End Latitude	End Longitude	Tower Info (# if new Location)
46.067	-116.464	45.969	-115.541	Start Existing 100', End Existing 20'
46.459	-117.031	46.592195	-116.390018	Start #3, End Existing 100'
46.459	-117.031	46.3294	-116.6337	Start #3, End #5
46.780432	-116.35869	46.469	-116.279	Start Existing 40', End Existing 100'
46.740544	-116.762588	46.780432	-116.35869	Start Existing 40', End Existing 40'
46.8111	-116.9148	46.592195	-116.390018	Start #1, End Existing 100'
46.3294	-116.6337	46.067	-116.464	Start #5, End Existing 100'
46.067	-116.464	45.863	-116.124	Start Existing 100', End #6
46.067	-116.464	46.1933	-116.0524	Start Existing 100', End #7
46.067	-116.464	45.9268	-116.12699	Start Existing 100'
45.826	-115.436	45.828	-115.435	Start #8, End #9
46.721344	-116.982701	46.6795	-116.9745	Start FSR NOC 20', End #2
46.721344	-116.982701	46.8111	-116.9148	Start FSR NOC 20', End #1
45.969	-115.541	45.826	-115.436	Start Existing 20', End #8
46.459	-117.031	46.421	-117.03	Start #3, End Existing 60'
46.780432	-116.35869	46.861	-116.398	Start Existing 40'
46.6795	-116.9745	46.459	-117.031	Start #2, End #3
46.923758	-116.893469	46.913103	-116.755657	Start Existing 50', End Existing 50'
46.913103	-116.755657	46.815	-116.559	Start Existing 100', End #4
46.815	-116.559	46.780432	-116.35869	Start #4, End Existing 40'
46.8111	-116.9148	46.923758	-116.893469	Start #1, End Existing 50'
46.8111	-116.9148	46.740544	-116.762588	Start #1, End Existing 40'

Redline AN-80i Links (or equivalent)

First Step is seeking quotations on 47 complete radio links including all mounting hardware, antennas, power supplies, surge protectors, etc. Preference is for the 3.65GHz frequency, followed by 5GHz. Below is a list of preferences or requirements.

- Links must be able to be utilized in a Point-to-Point or Point-To-Multipoint configuration via software upgrade key.
- For 3.65 GHz links, the High Speed Point-to-Point key with support for all channel sizes should be included.
- For the 5 GHz links, the 40Mhz / 108MB key should be included.
- 5 yr Extended warranty should be included
- Training course by the manufacturer should be quoted and included.

Line of Sight has been verified for each link. Included is a listing of our preliminary path calculations which show (32) 3.65GHz links and (15) 5GHz links. All locations and paths should be double checked and verified. Any discrepancies or changes to frequency should be noted.

Redline AN-80i Link Locations

<u>Link Locations</u>	<u>Start Lat</u>	<u>Start Long</u>	<u>End Lat</u>	<u>End Long</u>	<u>Proposed Freq</u>
Bovill City Hall to Bovill library	46.861	-116.398	46.85849	-116.39652	3.65 GHz
Bovill City Hall to Bovill school	46.861	-116.398	46.85774	-116.39352	3.65 GHz
Cottonwood Butte to Cottonwood school	46.067	-116.464	46.05175	-116.35163	3.65 GHz
Cottonwood Butte to NICI (prison)	46.067	-116.464	46.07874	-116.42813	3.65 GHz
Craigmont Col. Grain Elev. to Craigmont library	46.241	-116.472	46.2408	-116.47484	3.65 GHz
Craigmont Col. Grain Elev. to Craigmont Husky water tank	46.241	-116.472	46.239	-116.484	3.65 GHz
Craigmont Husky water tank to Winchester Tin Can water tank	46.239	-116.484	46.248	-116.62	3.65 GHz
Elk Butte to Elk River library	46.84	-116.117	46.78238	-116.18039	3.65 GHz
Elk City tower (FOC) to Elk City Howzen	45.826	-115.436	45.823	-115.445	3.65 GHz
Elk City tower (FOC) to Medical clinic	45.826	-115.436	45.824	-115.435	3.65 GHz
Gilbert Grade to Helgeson Hotel (Orofino)	46.469	-116.279	46.479	-116.253	3.65 GHz
Gilbert Grade to Orofino High School	46.469	-116.279	46.48996	-116.26559	3.65 GHz
Grangeville tower (Mt. Ida) to LCSC Outreach	45.863	-116.124	45.92531	-116.11799	3.65 GHz
Helgeson Hotel (Orofino) to Orofino Clearwater Library	46.479	-116.253	46.48046	-116.25174	3.65 GHz
Hemlock Butte to Timberline High School	46.473	-115.628	46.438	-115.87293	3.65 GHz
Kamiah tower to Kamiah Library	46.1933	-116.0524	46.2272	-116.02794	3.65 GHz
Kamiah tower to Kamiah Medical Clinic	46.1933	-116.0524	46.22709	-116.02539	3.65 GHz
McGeary Butte to Elk Butte	46.780432	-116.35869	46.84	-116.117	3.65 GHz
Nez Perce Courthouse to Nez Perce Library	46.23298	-116.24047	46.23375	-116.24048	3.65 GHz
Nez Perce Courthouse to Nez Perce Medical Clinic	46.23298	-116.24047	46.233	-116.24	3.65 GHz
Potlatch tower to Potlatch Library	46.923758	-116.893469	46.92806635	116.9000673	3.65 GHz
Potlatch tower to Potlatch Medical clinic	46.923758	-116.893469	46.9216183	-116.9007969	3.65 GHz
Spudhill tower to Deary HS	46.815	-116.559	46.79821	-116.55929	3.65 GHz
Spudhill tower to Deary Library	46.815	-116.559	46.79952	-116.56209	3.65 GHz
Teakean Butte to Weippe Funny Farm	46.592195	-116.390018	46.391	-115.933	3.65 GHz
Troy Bus Barn to Troy Library/City Hall	46.734	-116.767	46.7358	-116.76844	3.65 GHz
Troy Bus Barn to Troy Medical Clinic	46.734	-116.767	46.7358	-116.76845	3.65 GHz
Troy water tank to Troy HS	46.740544	-116.762588	46.73496	-116.76742	3.65 GHz
Weippe Funny Farm to Weippe water tank	46.391	-115.933	46.377	-115.941	3.65 GHz
Weippe water tank to Weippe library	46.377	-115.933	46.37585	-115.94302	3.65 GHz
Winchester Golf Tee water tank to Winchester Library	46.242	-116.62	46.23963	-116.6226	3.65 GHz
Winchester Tin Can water tank to Golf Tee water tank	46.248	-116.62	46.242	-116.62	3.65 GHz
Cottonwood Butte to Craigmont Columbia Grain Elevator	46.067	-116.464	46.241	-116.472	5 GHz
Cottonwood Butte to Nez Perce Courthouse (Lewis County)	46.067	-116.464	46.233	-116.24	5 GHz
Craigmont Columbia Grain Elevator to Craigmont High School	46.241	-116.472	46.24325	-116.47184	5 GHz
Elk City tower (FOC) to County building	45.826	-115.436	45.822	-115.433	5 GHz

Elk City tower (FOC) to Elk City Fire	45.826	-115.436	45.824	-115.44	<u>5 GHz</u>
Elk City tower (FOC) to Sheriff	45.826	-115.436	45.82	-115.458	<u>5 GHz</u>
Elk City tower (FOC) to US Forest Service	45.826	-115.436	45.83	-115.436	<u>5 GHz</u>
Grangeville tower (Mt. Ida) to Grangeville Elem	45.863	-116.124	45.92435	-116.12407	<u>5 GHz</u>
Grangeville tower (Mt. Ida) to Grangeville HS	45.863	-116.124	45.91906	-116.1298	<u>5 GHz</u>
Kamiah tower to Kamiah School	46.1933	-116.0524	46.22365	-116.02887	<u>5 GHz</u>
New Perce Courthouse to Nez Perce School	46.23298	-116.24047	46.2371	-116.24179	<u>5 GHz</u>
Potlatch tower to Potlatch Elem	46.923758	-116.893469	46.92155968	-116.8942523	<u>5 GHz</u>
Potlatch tower to Potlatch HS	46.923758	-116.893469	46.92164	-116.90176	<u>5 GHz</u>
Teakean Butte to Hemlock Butte	46.592195	-116.390018	46.473	-115.628	<u>5 GHz</u>
West Twin to Troy Bus Barn	46.8111	-116.9148	46.734	-116.767	<u>5 GHz</u>