The City of Greenville, NC is soliciting quotes from vendors who can provide Hardware and implementation services for a pair of BGP capable routers at the edge. This will enhance and simplify the City's current ISP redundancy solution. Must be a Cisco Premier level partner or higher.

Currently, the City uses Checkpoint Firewall with it's built-in ISP redundancy feature. The firewall does "DNS proxy" to respond to DNS requests with the appropriate IP for a given resource depending on which ISP is active at the time. This works fairly well but requires a lot of work and scripting on the firewall every time a new resource such as a web server is implemented. By implementing BGP and routing at the edge, this will greatly simplify the firewall configuration.

The City has already Identified what hardware to use for this. We have chosen to use Cisco Catalyst 3650 switches since they are BGP capable and at a lower price point as compared to the larger router models. Since we will be receiving our default route from our ISP it will not be necessary to store a full route table. Therefore the 3650s will be appropriate for this implementation.

The City has two ISPs. MCNC (Primary ISP with 1gb up/down) and Suddenlink (Secondary ISP with 10mb up/down). We have two connections to each of the ISPs. We also have two datacenter locations being City Hall and a the Emergency Operations Center. In the proposed solution, one 3560 will be located at City Hall and one at the EOC. At each location, MCNC and Suddenlink will terminate to the 3560 switch using a 1gb single-mode SFP. EBGP protocol will be used between the City and the ISPs. IBGP protocol will be used between the two 3560s. The City will apply for it's own AS#. MCNC will transfer control of a single Class C subnet to the City. This class C subnet will be assigned to our AS# and will be used for both MCNC and Suddenlink. The link to Suddenlink will be prepended to prevent traffic flow until MCNC is unavailable. We do not wish to load balance over these ISPs. All traffic should pass via MCNC until such time as MCNC is unavailable and will then fail over to Suddenlink.

Vendor is to respond with a fixed rate fee for implementation services that includes all travel and lodging expenses. Implementation services should include:

- Pre-install planning sessions
- Knowledge transfer and training
- Physical installation of equipment
- Pre-build work such as OS updates, patches, license install and config, test connectivity
- Working with City, ISP, Cisco to coordinate cutover.
- Cutover to be performed and tested during non-peak (after hours) time.

*City will handle any Firewall re-configuration, making requests to ISPs, and applying for AS#.

In addition to the implementation services, please quote the following hardware. Be sure to include shipping:

WS-C3650-24TS-E	**Cisco Catalyst 3650 24 Port Data 4x1G Uplink IP Services**	2
CON-SNT-WS5024SE	**SMARTNET 8X5XNBD Cisco Catalyst 3650 24 Port Data 4x1G Up**	2
S3650UK9-33SE	**CAT3650 Universal k9 image**	2
PWR-C2-250WAC	**250W AC Config 2 Power Supply**	2
PWR-C2-250WAC/2	**250W AC Config 2 Secondary Power Supply**	2
CAB-TA-NA	**North America AC Type A Power Cable**	4
GLC-LH-SMD=	**1000BASE-LX/LH SFP transceiver module MMF/SMF 1310nm DOM**	8

Please respond no later than 5pm Friday, April 24th. You may contact me (see below) for additional information if needed.

Kyle Pitchford
Network Analyst III / IT
City of Greenville, NC
kpitchford@greenvillenc.gov