



REQUEST TO
PROCURE AT&T
1GB MIS SERVICE
& LEASE FATPIPE
NETWORK
SOLUTION

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Overview

The City of Riviera Beach is in need of a increasing the internet speed of their current network and providing a high availability solution that will protect the City from internet downtime.

This document below explains the two items the Information Technology Division recommends and the reasons behind their recommendation.

Current Internet Infrastructure

The City currently utilizes one **100MB** Internet bandwidth pipe to provide internet for the entire City, including the Police and Fire Department through Lambda Rail. This consists of:

- ❖ 495 Staff Members
- ❖ 1293 Devices

70% of these users and devices use City internet for business purposes on a daily basis.

With this in mind, the best practice recommendation for a group of 50 users is exactly 25.6MB to provide those users with fast speed internet. *Please Note: This equation does not take into effect the following: citizens utilizing City upload bandwidth to download documents, public wireless internet being provided to staff and public at City facilities, and the bandwidth needed for the staff that work remote (Police, Fire, etc.) that would need a fast internet connection from our infrastructure in order to receive the best performance they need to do their work using the City's Network Infrastructure.*

This is solely internet use for 50 users. This would mean that the City would need to be at 102MB in speed in order to provide internet to its staff. The City is below its capacity to be able to provide its staff members with the adequate speeds they need not to mention the applications that need to reach the internet and speak with citizens and the web elsewhere.

The 2nd issue that the City has with their internet is not the speed but the availability. Currently, the City only has 1 internet provider. If this internet provider has a technical difficulty, the City would not be able to reach the internet until that has been resolved.

Recommended Internet Infrastructure

In 2015, the Information Technology Division collaborated with ClientFirst Consulting to create the IT Strategic Master Plan. ClientFirst is a Technology Consulting firm with 10+ years' experience, 1,000 projects with over 250 public agencies focusing on government agencies, processes, best practices, network designing and strategic planning.

In this Master Plan, the team work side by side tackling the entire network infrastructure and recommended that the City do the following:

- ❖ Implement redundant internet connections with automatic failover
- ❖ Upgrade to a higher bandwidth of 100MB or Higher
- ❖ Immediately budget for and implement additional Internet bandwidth, using a commercial-grade, and dedicated Ethernet service.

During review of services, the Information Technology Division found two solutions that will provide the City with this exact design:

- ❖ Procure AT&T 1GB Managed Internet Services
- ❖ Lease FatPipe Network Solution.

By providing the City with a 1GB Internet bandwidth pipe, we will increase our capacity and allow for expansion and growth within our current infrastructure.

FatPipe is a Network device that would reside in the City's main data center. This devices provides WAN (Wide Area Network) redundancy. This allows us to take multiple internet service provider connections into one device and it will be able to failover in case of a line outage.

Procurement Process

The Information Technology Division went through the process of collecting 3 quotes from 3 well known commercial based dedicated internet access service companies: AT&T, Comcast & XO Communications. One issue during the procurement process is that neither Comcast nor XO provide FatPipe Network Device leasing or purchasing and can only provide Dedicated Internet Access Cost. The Information Technology Division went through the process of retrieving 3 quotes for the FatPipe solution. AT&T is the only vendor currently that provides leasing for the FatPipe system. Below are the cost for each Internet Service Provider:

Dedicated Internet Access Quote Prices:

Vendor	Price	Frequency
AT&T	\$2252.00	Monthly
Comcast	\$2700.00	Monthly
XO Communications	\$3414.00	Monthly

FatPipe Device Price (Leasing): AT&T is the only company that has Financing for The FatPipe Device that provides the City the ability to lease the device and have it supported 100% by the vendor as well as provide 24-hour replacement support if the Device completely fails. By procuring the complete Device at full cost, the City would need to procure a 2nd one for Spares and also pay a continuing Maintenance Fee with FatPipe to keep the devices services and prevent any downtime.

Vendor	Price
AT&T	\$147,003.95
FatPipe	\$197,547.00
Hayes Communication	\$185,476.39

Conclusion

The City of Riviera Beach is in need of a increasing the internet speed of their current network and providing a high availability solution that will protect the City from internet downtime.

By taking ClientFirst and the City's Information Technology's recommendation, the network will be able to:

- Provide staff and public users with faster download and upload speeds between sites.
- Improved internet speeds at all sites.
- A High Availability Internet solution that protects the City from Internet downtime.