900 words

Rauf Bolden, Orange Beach

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Orange Beach is the Municipal Leader Providing Free Wi-Fi

Orange Beach has Free Wi-Fi at every city building, obviously excluding Police and Fire. This high-bandwidth service is free of charge for the public to use, and is available on a 24/7 basis. How did this happen?

In 2005 during reconstruction after Hurricane Ivan, former Mayor Steve Russo asked me if we could build a Wi-Fi blanket over the entire City of Orange Beach. Technologically it was not possible at that time.

Three years later, I met with Finance Committee Chairman Al Bradley, discussing IT budgets. He asked about innovation. I told him about the old mayor's idea of Wi-Fi as a public service. He liked the concept, but suggested the city provide free Wi-Fi at all city buildings instead of competing with the local providers for home service.

I knew we could make this happen, and increase employee productivity at the same time, but we needed to upgrade the city's technology infrastructure from copper to fiber-optic. As a lawyer and CPA Bradley understood. He retired as CEO of a company that used fiber optics, and he was able to get the funding a Chairman of the Finance Committee.

Al and City Attorney Wanda Cochran founded the Telecommunications Committee. We started work, monitoring Franchise Agreements for utility vendors digging up the city's rights-of-way. This tactic allowed us to strategically place the city's fiber-optic infrastructure. In the early days there were only three of us, but our brief quickly expanded to membership from almost every department in the city.

Projects of this size need to be done in multi-year steps. This is how it started.

We sought a fiber-optic partner with experience providing reliable high-speed service. I wrote a Request For Proposal (RFP), detailing the specifications, including four strands of dark fiber (dedicated for city use), owned by the City of Orange Beach. We also required sufficient bandwidth that would carry the city well into the future. Harbor Communications LLC (https://www.harborcom.com/) of Mobile won the bid, providing the infrastructure and the bandwidth.

Phase One:
- City Hall
- Finance
- Fire Admin and Fire Station One
- Police and Municipal Court
- Library

Phase Two:
- Senior Center
- Art Center

- Fire Station Two
- Recreation Center
- Tennis Center
- Community Center
- Aquatic Center
    Phase Three:
- Golf Center
- Sportsplex
- Event Center
- Sail Camp
- Fire Station Five
    Phase Four:
- Public Works
- Public Works Shop
- Sewer Maintenance Shop
- Sewer Plant

Planning for security was important. We resolved the public/private network issue, requiring each building have a physical separation (by external IP), rather than logical separation (by internal IP), segregating the networks from each other. This is more expensive, requiring additional hardware, but isolates each network on its own external IP address, eliminating the possibility of cross talk or network jumping.

Funding any municipal project is always a key issue. Al Bradley secured funding for the fiber-optic project as Chairman of the Finance Committee, and as Chairman of the Telecommunications Committee.

We presented a persuasive argument, stating fiber-optic connections also increased productivity for city workers. Image you are on a slow connection, spending ten minutes per day on DSL, drinking coffee, waiting for files to upload or download. This translates to 50 minutes per week, times 52 weeks per year, equals 2,600 minutes, or 43 hours (approx. one week) of productivity lost per year, per employee at each workstation. What business can afford that?

Some council members resisted, holding we do not need technological expansion, during a recession, combined with city-employee layoffs. With 20/20 hindsight, looking back to 2008 Chairman Al Bradley was a visionary, fighting to give all city offices the high-speed functionality needed for payment processing, jail bookings, event registrations, fire reporting, webinars, cameras, and online training, with the added amenity of Free Wi-Fi for the public to use. By leveraging the technology, we were able to demonstrate our solution; doing more with fewer employees is possible.

Orange Beach can thank one man for setting the bar so high for fiber-optic connectivity, allowing our city workers to be more efficient, simultaneously giving the public free access to high-speed Internet at city facilities.

This public service is invaluable, allowing residents to stream music as they work out in the gym, or for baseball parents to stream movies, waiting at the Sportsplex for their game to start. You can easily pull presentation files from your cloud account in the city's various meeting rooms, or download homework assignments after school. Orange Beach

also provides the SEC and NAIA with bandwidth for broadcasting Women's Soccer Tournaments.

Al Bradley established the Free Wi-Fi standard in Orange Beach. This is a guiding light for other municipalities to follow.
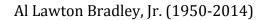
Al Lawton Bradley, Jr. (1950-2014)

Photo courtesy of Rauf Bolden (publisher@velvetillusion.com)

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