

From Radio to Fiber: Alabama Seeks to Guide Providers

California probably spent more on its broadband task force report than Alabama will spend this year actually helping to deliver broadband. Here's a common-sense view from the trenches.

By Steven S. Ross ■ *Editor-in-Chief*

Ned Butler assists in formulating Alabama's broadband policy. But his office is so small that it does not rate a link on the Alabama Department of Economic and Community Affairs Web site. He called to question us about statewide issues, and we resolved to interview him in return.

Butler was engineer at WTLS when it began broadcasting in Tallassee, Alabama, in 1954. He bought the station from its founder, Bert Bank, in 1957. Butler had put the first FM station in Tuscaloosa on the air for Bank in 1953, and also built stations in Ozark, Luverne and Talladega in the 1950s. Together with a friend in Texas, Tim Thomas, Butler developed what they called Radio Television Switch Station (RTSS). It was a forerunner to cell phones.

Our interview was interrupted by a surprise birthday party staged by his co-workers for his 80th birthday.

BBP: What exactly is your title?

Butler: State Radio Plans Director at the Alabama Department of Economic and Community Affairs.

BBP: How did you get involved with broadband at the state level?

Butler: I'm a broadcast engineer. I started back in 1949. I was president of

Alabama Television for eight years, but I've had all kinds of broadcast experience. I was a consultant to the Department of Health & Human Services on emergency medical communications. We devised a system where we would put radio transmitters at base stations in one

other municipal purposes, comes from cable companies. They will lay fiber in a county and we work with them to use their fiber for what it costs them.

BBP: What about other costs?

Butler: We keep costs down. For instance, we transmit uncompressed video for distance learning and for police work, like video arraignments. It takes about 200 Mbps for our school video channels. We use another 100 Mbps for Internet and network control.

BBP: How do you get counties to be interested? Connect-

Kentucky, for instance, says only 40 of Kentucky's counties even had Web sites until it started evangelizing. Now all of them do.

Butler: I usually go into a county and talk them into doing this, and then I work with the cable companies.

BBP: Who usually pays? Does the county pay or does the state subsidize some of it?

Butler: Well, the schools use E-Rate, funded by the federal Universal Service Fund. The subsidy is as high as 90 percent. We get a good rate, because so many of our counties serve low-income people. They calculate it by percentage of kids receiving subsidized school

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county using odd frequencies and one in the next county using even frequencies. There were eight emergency frequencies statewide for doctors and paramedics to talk on two control channels.

BBP: How would you describe the broadband situation in Alabama right now?

Butler: We actually have quite a bit of broadband, at speeds far higher than the 200 Kbps that the FCC considers as broadband. AT&T – originally Bell-South – has most of the market, mainly in bigger cities, and we have about 32 small telephone companies, cable and telcos. Much of our public fiber networks, for schools, libraries, jails and

lunches. In most places we get about 85 percent subsidy from the federal program. I have one cable company that supplies four to six fibers for every school. It started at \$300 a month, now it's \$350. We can use those fibers any way we want to. You can't get a fractional T1 out of the county for that.

BBP: Do you feel they're used enough?

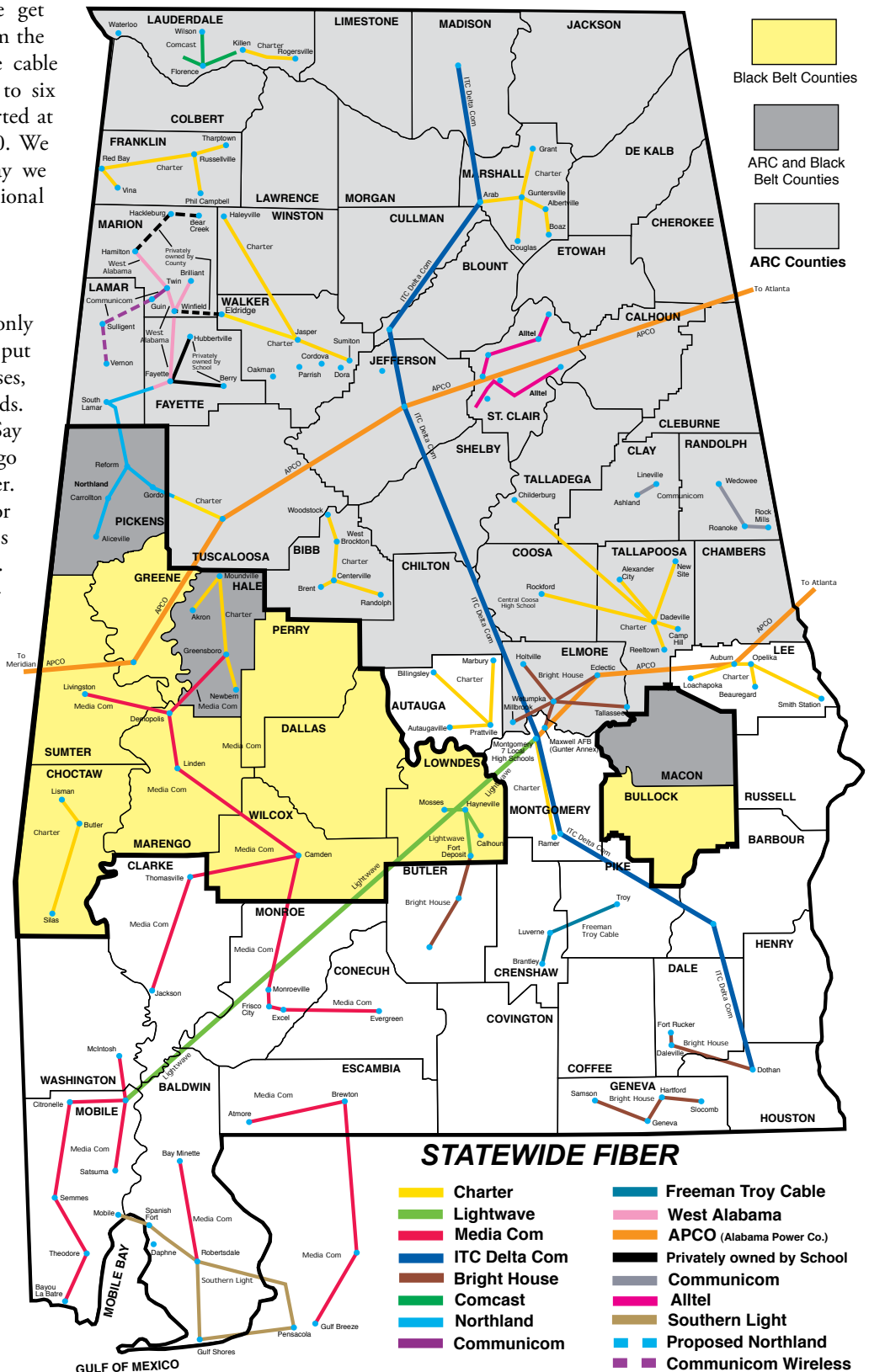
Butler: Oh, yeah. We don't only put the schools on that. We put the hospitals, the courthouses, video arraignments, bail bonds. We have the jails tied to it. Say the jailer is getting ready to go to the hospital with a prisoner. He goes online to the doctor first, on video, and nine times out of ten no visit is necessary. (See a more complete discussion of E-Rate in Christopher's Mitchell's article this month, page 40.)

BBP: How many counties actually take advantage of that?

Butler: Some of them do this without my help. And we have minimum resources. I was rocking along and not getting any help at all until March 2005 in Atlanta, where this guy Brian Nichols killed four people while escaping from a courthouse. The one where he was eventually talked into surrendering by a Bible-reading hostage. Everyone looked at the courthouse video. It got our attention.

BBP: In many parts of the country, once the schools have the fiber the demand grows: The kids bring the demand home, the teachers think of things to do. The libraries get in on it. Is that happening in Alabama?

Butler: Yes, I would say so. I haven't done any comprehensive



Fiber backbone in Alabama. "Black Belt" refers to a belt of extra-rich black-soil farmland stretching across the state. Eight of the counties in the belt are among the 100 poorest in the US. ARC refers to the Appalachian Regional Commission, which stretches across 13 states. In Alabama, it covers 37 counties.

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inventory of other states' progress, but I think we rate pretty high in broadband use across the state. We do have rural areas that don't have it. But I think we compare well to Kentucky, for example.

BBP: We've felt that ConnectKentucky has been, on balance, a big success. But certainly some broadband activists feel it is tied too closely to the RBOCs.

Butler: And when they talk about broadband, they use that 200 Kbps definition. Why call that broadband? You can transfer 200 kilobits over a regular telephone line. But I guess people are more uneducated about broadband than anything I've ever been involved with. They talk about it: "I got broadband," and I say "Whadda ya got?" "Well I don't know, but it's fast." They don't have a clue.

BBP: It's a constant fight for us.

Butler: We need FTTH, like in Asia where they have 100 Mbps. I tell people all the time how they should do this, but you get all kinds of responses. The bad part about it they don't understand the advantages. We're involved in economic development efforts here. We have Hyundai and Honda, and Mercedes plants located in Alabama. But the Hyundai plant in Montgomery, the first thing they wanted to know was about broadband. We were able to provide broadband for them.

BBP: That's for their factories. What about their executives, where they live, and suppliers?

Butler: We have Bright House and Time Warner in some places. I have broadband in my home. I live just 10 miles

from Montgomery, and I have 5 or 6 Mbps downstream.

BBP: Is that in a master-planned community, or were you just lucky enough to have cable there?

Butler: No, in fact I can get it from two cable companies. One is Bright House, and one is family owned. There's a community in Bullock County, Union Springs. That was the first town in Alabama with FTTH. And they have less than 4,000 population. The lady who owns the company told me she had over 2,000 customers doing triple play. I talked to her about two years ago and asked her something and she says, "Well, I'm an old woman." And I said, "I'm an old man." And she said, "I'm older than you." And I said, "You couldn't be." And she said, "I'm 82," and that was two years ago. I met her and she looked 65, smart, sharp as a tack. I wish everyone understood what she did about fiber. It would be great. (The company, a subsidiary of ROPIR Industries, deployed starting in 2003, using the Optical Solutions Fiber-Path 400; Optical Solutions is now part of Calix.)

BBP: Aside from the Alabama Department of Economic and Community Affairs, who watches out for economic development in Alabama?

Butler: The Alabama Development Office (ADO).

BBP: You're from a state that doesn't have a lot of money. What's the proper state role in bringing broadband to its citizens?

Butler: The use of ConnectKentucky consulting services has been discussed, but I'm not sure we'll get anything more

from them than we have already done ourselves. We do have several bills pending in our House of Representatives, to appoint a broad-based state commission to look at the need. It may be too unwieldy. It certainly will take some time.

BBP: One of the things that caught our attention about ConnectKentucky a few years ago was the goal to get every county connected to broadband and using E-government; at the time there were only about 40 Kentucky counties doing that. Now all 120 are. That seemed impressive.

Butler: What they've done is probably good. They probably paid through the nose to get it done. We're trying to get all the companies here to cooperate to spread broadband outside of the big cities. There is a lot of backbone intercity fiber in the state.

BBP: Where would you see Alabama being in five years?

Butler: I have great hopes for what we're trying to do. We do have some independent phone companies and cable companies that are real active in Alabama and that want to do fiber. We'll accomplish something. It won't be what it could be if AT&T doesn't cooperate, though. Somebody is going to have to take on the driver of the status quo. I had a meeting with them last week and they were very interested in what we proposed to do. **BBP**

For More Information

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