

Questions for the Record from Senator Roger Wicker
To
Mr. Darrington Seward

Question 1. If you could, how would you direct the FCC to ensure that sufficient Universal Service Fund support remains available to both (1) fund the existing operations of rural wireless networks and (2) encourage further deployment in America's rural areas?

Answer: Thank you for asking specifically about support for wireless broadband. Ag producers need access to all broadband technology options -- wireline broadband, fixed wireless, or mobile -- to reap the full benefits that new precision agriculture offers. We need the flexibility to adopt the appropriate technology solutions depending on ag equipment used, crops, livestock, terrain, climate, proximity to broadband interconnection points and population centers, and barriers to local land acquisition and access. Wireless services are also important to sustain the developing Internet of Things innovations that have emerged to address machine and data communication needs in the agricultural context.

However, the reality is that broadband, particularly high-speed wireless broadband, still is not readily available in many rural areas including agricultural croplands and ranchlands. To ensure that sufficient funds are available for existing wireless operations, the Commission must reevaluate its programs and rules to provide ongoing support for wireless broadband networks that could not be maintained absent support. The absence of an unsubsidized competitor in a particular locale could be a threshold test to determine whether ongoing support is necessary to maintain wireless broadband. In many rural areas, there may not be enough subscribers to cover the ongoing costs of operating existing wireless networks while keeping rates reasonably comparable to those in urban areas. The Commission needs to develop a means to identify markets in need of ongoing support and adopt rules to calculate such ongoing support. Existing wireless facilities will also benefit if the FCC takes steps to promote middle-mile facilities to support mobile broadband, not just wired last mile connections. In particular, the FCC should amend its USF Connect America Fund rules so that smaller, rural providers may also receive and use CAF funds for upgrading middle-mile facilities.

Further deployment of wireless networks must also be a priority that is reflected in the Commission's programs and rules. One important step toward achieving this goal is for the Commission to give special attention to preserving and updating the Mobility Fund. In 2011, for the first time, the FCC created a support fund dedicated exclusively to mobile services. The Mobility Fund was established to ensure the availability of mobile broadband networks in areas where a private-sector business case was not supporting needed wireless services. The FCC's early plans contemplated a Mobility Fund Phase II but today, more than 5 years later, that fund is yet to become a reality. The Commission has since revised the program to retarget funds to support 4G LTE mobile broadband and voice service and in 2014, the FCC asked for further input on how best to distribute Mobility Fund Phase II support. Now, after 2 1/2 years, the FCC has not adopted rules to implement Mobility Fund Phase II. Instead, despite the growing demand for and importance of mobile services in rural areas, the Commission's current commitment to the Mobility Fund is in real question and the Commission has even suggested that it may not continue the fund. The Commission should confirm that expanded broadband in rural areas is a current priority by issuing a decision that preserves and even expands the Mobility Fund Phase II. Although I believe, and many other Ag producers would agree, that there is a need to update these support programs to

better ensure coverage of agricultural areas, the Commission can and should act promptly to confirm the status the Mobility Fund Phase II while considering further updates.

Another important action the Commission should take to encourage further deployment in rural areas is to revisit how best to distribute CAF support. The method by which CAF funds are distributed will determine whether rural families and businesses in agriculture will have the flexibility they require to apply the technology solution - whether fixed or wireless or some combination of both -- that best meets their particular needs. The "tiered" approach that the Commission has proposed would enable only wireline providers to bid in the first round and thereby would create significant barriers to wireless funding. That approach would limit the flexibility of users to employ the most appropriate technology solutions to meet a wide variety of circumstances. If a licensed or unlicensed wireless service is a superior option for particular areas based on the cost and other efficiencies that apply to the equipment, terrain, distance and other specific attributes of a locale to be served, then wireless providers should not be precluded from bidding in the first round to meet these needs.

Question 2. What is the best way for the FCC to give rural businesses like yours and rural consumers like you and your neighbors in the Delta some certainty that there will be no reduction in access to the multiple wireless service providers your community needs to access healthcare, educational tools, or run your farms and businesses?

Answer: I agree that rural consumers do need certainty about their continuing access to wireless services. The prospects for continuing access to technology is an increasingly important factor for consumers making decisions about where to live, go to school, and operate businesses. The Commission could bring more certainty to this area by making its commitment to expanded rural broadband services, including wireless services, explicit

and by taking prompt, meaningful action to update its programs, broadband measurement mechanisms, and rules to make this a reality.

There is a difference of opinion between commercial providers who quote very high coverage statistics and rural users whose demand for high speed broadband is still unsatisfied. Even Chairman Wheeler recently acknowledged the gap between the FCC's broadband coverage statistics which show nearly 99% coverage and the much different real-world experience in many rural areas where broadband is available to a much lower percentage of users. The rural broadband challenge is far from over and the mission cannot only be to avoid reduction in services -- we must continue to actively support the expanded deployment of rural broadband. The Commission should consider seeking an update of the public record on the status of mobile broadband in rural areas and the specific measures that can be adopted to obtain better data on the coverage, quality and performance characteristics of mobile broadband. In addition, both the CAF and Mobility Fund should be re-evaluated to identify what changes are necessary to address the soaring growth in device-to-device communications in the Internet of Things, including in machine-to-machine (M2M) communications used in agricultural production.

As a part of this effort, the Commission should expressly include broadband coverage of agricultural areas -- croplands and ranchlands -- in its Mobility Fund and CAF policy goals. However, despite some marketing statements declaring broadband coverage in rural America to be near complete, croplands and ranchlands have lagged behind in adequate mobile coverage. These locations are important centers of economic activity for many rural communities but today's support program rules do not adequately

account for the need for broadband services in these areas. The FCC's rules for Mobility Fund support, as well as CAF support, should direct funding not just to facilities serving residential and business user population centers identified with conventional measures of population, but also to agricultural farming (cropland) and ranching operations that are integral to many local economies in rural areas. The Commission should also direct support from the Mobility Fund to coverage of rural roads. The evolution of the Mobility Fund priorities and rules would be consistent with the long recognized aim of the support programs to bring services to where "people live, work and travel."

Finally, to implement this step, the Commission should adopt a metric of broadband access in active croplands and ranchlands (and farm and ranch buildings) to identify areas of greatest need. "Cropland" coverage can be assessed in a variety of ways and the FCC could take advantage of USDA data for crop operations, the US Geological Survey's Land Use classification, or other databases. In support of this plan, the FCC's program to collect broadband data also should be updated to ensure that broadband service to agricultural machinery is counted.