

**Mark Ruff**  
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**House Public Utilities**  
**HCR 27**

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Good morning, Chairman Stautberg, ranking member DeGeeter, and members of the House Public Utilities Committee. My name is Mark Ruff. I am a farmer in Pickaway, Ross, and Franklin Counties. My wife, Marcia and I consider ourselves to be managers and stewards of the land and we utilize the latest of technologies to do so in an efficient and responsible manner. Thank you for this opportunity to testify as a proponent of House Concurrent Resolution 27.

Agriculture is Ohio's number one industry, employing one in seven Ohioans and contributing \$107 billion to our economy. Individuals, partnerships, and family corporations own 98 percent of Ohio's farms.

We are all benefactors and consumers of Global Positioning Systems (GPS) through our cell phones, vehicles equipped with navigation systems, Garmin's, and other handheld devices. We use these systems to find what has been lost, get or keep us on the right roads, and help us in the case of an emergency.

Farmers use GPS for different but similar purposes. This technology is being used by today's farmers for farm planning, field mapping, soil sampling, tractor guidance, crop scouting, variable rate applications, and yield mapping. GPS allows farmers to work during low visibility field conditions and more hours per day with less fatigue. More precise application of pesticides, herbicides, and fertilizers, and better control of the dispersion of those chemicals are achieved through precision agriculture, thus making farms more environmentally friendly and at the same time, more efficient, productive, and profitable.

GPS equipment manufacturers have developed several tools to help farmers and agribusinesses become more productive and efficient in their precision farming activities. Today, many farmers use GPS-derived products to enhance operations in their farming businesses. Location information is collected by GPS receivers for mapping field boundaries, roads, irrigation systems, and problem areas in crops such as weeds or disease. The accuracy of GPS allows farmers to create farm maps with precise acreage for field areas, road locations and distance between points of interest. GPS allows farmers to accurately navigate to specific locations in the field, year after year, to collect soil samples or monitor crop conditions.

Precision agriculture is now changing the way farmers and agribusinesses are able to view the land. The use of GPS, geographic information system (GIS), and remote sensing, provide information needed for improving the land through enhanced utilization of fertilizers and other soil amendments, thus determining the economic threshold for treating pest and weed infestations, and protecting natural resources for future use.

Personally, we have invested over \$100,000 into the devices that accumulate and utilize the information as well as control the fertilizer and chemical application equipment, as well as planting and harvesting equipment. More important than that investment, is the systematic approach that we have developed to gain efficiencies on the farm and enhance our level of environmental stewardship. The use of this technology is in jeopardy due to the conventional waiver that the Federal Communications Commission recently granted to LightSquared, a broadband internet provider, which will enable it to operate high-speed broadband over frequencies normally used by low-powered satellite-based systems, such as GPS.

Although I believe that high-speed broadband services have great potential to bring opportunity to rural Ohioans, I do not think that opportunity should come at the expense of losing GPS. Instead, the FCC should ensure that both LightSquared and GPS have worked out any issues that may affect those currently using GPS.

Thank you again Mr. Chairman and members of the committee for allowing me to be here today in support of this resolution. I would be happy to answer any questions you may have at this time.