

Do those orange markers in Greendale and elsewhere mean 5G is coming?

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Jane Ford-Stewart

(Photo:
Elaine



Unger/Submitted)

The fast-as-lightning 5G Internet is coming eventually to Greendale and surrounding communities, with the cylindrical orange markers that have been popping up showing the trail it will likely follow, at least for Verizon Wireless, said company spokesman Andy Choi.

With 5G technology, said to be up to almost 100 times as fast as 4G, two-hour movies will blast into cellphones and tables in only a minute or two. It also could make driverless cars and virtual reality a reality.

The rub is that the little waves 5G uses can only travel short distances, according to the Greendale-based Wisconsin for Safe Technology. So, 5G needs lots of antennas, one every 10 to 12 houses, said the more than 200 scientists and doctors who signed a petition asking for a moratorium to 5G.

The Wisconsin group said an antenna might be needed every two to 12 houses. In places where 5G is farther along, antennas are mounted on light poles, where possible. said Elaine Unger, lead organizer of Wisconsin for Safe Technology.

The Greendale-based Wisconsin for Safe Technology has geared up to oppose the rollout of 5G, citing health concerns from microwaves the dense network of 5G antennas will generate. (Photo: Elaine Unger/Submitted)



Radiation 24/7

Radiation coming from those antennas 24 hours a day, seven days a week has some people worried. That includes Wisconsin for Safe Technology and the more than 200 scientists and doctors worldwide who signed the petition in December asking for a 5G moratorium.

The scientists asked for the 5G rollout to stop in the European Union until independent scientists can assure that 5G is safe. The scientists also wanted proof that the total radiation levels caused by 5G plus 4G, 3G, 2G and WiFi will not be harmful to people, especially to infants, children and pregnant women, as well as to the environment.

Locally, concern about the safety of children arose because four of the orange markers are near Greendale's College Park Elementary School. Others are close to homes, Unger said. The fear is that 5G cellphone antennas will be located where the orange markers are.

That is not the case, Choi said.

Updating 4G cables

The markers just show where the underground 4G fiber optic cables are as Verizon upgrades its cables, he said. Those cables could eventually accommodate 5G, he said.

But he assured, "It's not like each marker will have a small-cell antenna."

"Small cell" is the term used for 5G antennas.

Like the 4G network, 5G needs both cables and antennas, Choi said. The cables are not for cellphones, he said.

"The cables help support devices that demand high-data transfers, such as streaming, movies and videos," Choi said.

5G already

So far, Verizon has not provided 5G service to cellphones. That's coming in 2019, Choi said. It has, however, turned 5G on in four cities for home computers. Those are Indianapolis, Sacramento, Houston and Los Angeles, he said.

As to Greendale: "There are no official plans for 5G in that area," at this point, Choi said.

Other carriers also are progressing toward 5G next year.

Strengthen ordinance

Concern about the possible health and aesthetic impacts of 5G antennas, Greendale trustees are considering changing the village's cellphone antenna ordinance.

The village probably can't ban the antennas, said Village President Jim Birmingham.

Only this spring, the village lost a battle to keep a cell tower from being built on church property. State law has made it nearly impossible for communities to deny cell towers, Birmingham said.

Instead, the proposed ordinance would make cellphone companies inform the village of their plans, if they intend to use village rights-of-way. It also would require letting people within 500 feet know that cell antennas are coming.

"We have a right to know what's going on in our right-of-way," Birmingham said, and to tell citizens that cell antennas are coming.

The village board, meeting as a committee of the whole, on Thursday, Dec. 13, took public input on the proposed ordinance and sent the draft back to incorporate that input. The proposed ordinance will likely be voted on in mid-January.

Currently, We Energies is free to let the antennas be installed on its poles because the company has permission to use village rights-of-way, Birmingham said.

Possible risks

Elaine Unger, Greendale, lead organizer of Wisconsin for Safe Technology, was reasonably happy with the discussion.

"The village board members seem to understand the health risks associated with 5G cell towers in the public rights-of-way so close to homes and schools," she said.

Health risks are the main concern of the group, she said. No independent studies have shown all the radiation is safe, she said. The group advocates installing cables, rather than wireless signals.

Unger pointed to the March 2018, report of the U.S. National Toxicology Program's \$25 million, 10-year rodent study. Its report said the study found "clear evidence" of increased cancer risk in male rats from low level exposures, she said.

Also, the World Health Organization has classified wireless radiation in general as a group 2B "possible human carcinogen," and a recent study conducted by the National Institutes of Health has corroborated this finding, she said.

Other studies have suggested that typical exposures to cellphone-type radiation can cause disruption of normal brain development in fetuses and learning disabilities, heart abnormalities and electro-hypersensitivity, she said.

Critics say the Federal Communications Commission has not kept up with the safety aspects of the new technology.

"Our nation's wireless radiation guidelines have not been updated for over 30 years and only address thermal exposures set by the FCC," Unger said.

The other side

Countering those concerns is the Cellular Telecommunications Industry Association where Jilane Rodgers Petrie, director of public affairs, said, "According to the FCC, 'radiofrequency emissions from antennas used for cellular and PCS transmissions result in exposure levels on the ground that are typically thousands of times below safety limits.'"

She also quoted FCC Commissioner Brendan Carr at a Senate Commerce forum in Sioux Falls earlier this year who said, "The FCC, as well as other agencies that are experts in health and safety issues, are always looking very closely at these issues, staying up to date on the latest science. They've looked at all of the studies and all of the information and they have reached the determination that these are safe."

Can't say 'no'

With all these doubts surrounding the issue, she said communities should be able to refuse to allow cellphone antennas, she said.

"If our state's laws weren't so restrictive, the village may have been able to draft more protective ordinances keeping 5G cell towers further away from homes and schools," Unger said.

"We hope that State Rep. Ken Skowronski and Sen. David Craig get working on changes to our state's 2013 Mobile Siting Regulations this session, returning some reasonable control to local government," she said.

Wisconsin for Safe Technology UA, is a citizens' group that is part of Americans For Responsible Technology. Similar area groups are Oconomowoc For Safe Technology and Electrical Pollution - Waterloo, Unger said.

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