Nearly every municipality in Iron County is currently involved with or getting ready to begin or has recently completed some form of infrastructure project.

Water and sewer lines are being replaced, fiber optic cable is being installed, roads being repaired. When we drive down those roads, turn on the tap or flush a toilet, do we think about what keeps all those systems going and flowing?

Scott Huler, author of “On the Grid,” did just that, putting together a pretty comprehensive explanation of where our infrastructure came from, how it works, and where it’s going.

I recommend reading this book. With chapters titles such as “A Chess Game You Never Win,” (water treatment), “The Asphalt Ballet,” (the story of how our roads came about and why they’re so insanely expensive to fix), to “The Big Ravioli,” (waste management), Huler delves deeply and clearly into our infrastructure, using his hometown of Raleigh, N.C., as the pivot point, hoping to mend the lack of attention we pay to the “wires and pipes and utility poles and leathern dams and pumping stations and cell phone towers,” noting that “never have so many known so little about so much.”

Two conclusions are constantly reiterated by Huller—one, that we cannot ignore our infrastructure any longer and pretend it all “just down there.”

Citing the Roman Empire and its massive road structure, once it stopped maintaining them, its civilization pretty much went south. We can do a fine job of building roads, water systems and information networks, but must be diligent about taking care of them.

And that is an expensive proposition. Again, just using roads as an example—how to put steadily decreasing revenues toward keeping our roads passable?

Talk about returning formerly paved roads into gravel—in other words, going backwards in infrastructure maintenance. And, the city of Iron River admits that roads get repaired only when a grant-funded water or sewer project goes through—that’s the fact of the matter.

The second, and more positive conclusion Huler makes throughout the book is in praise of the engineers, who make sure that before any backhoe even scrapes a morsel of dirt from the ground, that every inch of a project, whether it is a road repair, water and sewer line repair or installation, water treatment or utility work, is marked, inspected, GISed and GPSed, scrutinized and organized.

We need engineers, he says, and the engineers need citizens who understand the basics of what they do. This is what he attempts with “On the Grid.”

His final conclusion: “Since the end of the Roman Empire, allowing your infrastructure to rot has been a fine way to speed societal collapse.”

And it takes money. In 2008, the Urban Land Institute estimated that we run an annual infrastructure funding deficit of at least $170 billion.

We will need to reallocate funds to infrastructure and elect legislators who will help that happen. There may be the need for communities to come together and fund their own projects through special assessments and prioritizing. Huler says we can’t take our systems for granted anymore.

--Marian Volek