INDIANA CHAPTER APWA - WHITE PAPER

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Asset Management Systems & Deployment in Bloomington

After returning to Earth following the Apollo 11 moon landing mission in 1969, astronaut Neil Armstrong conveyed the following message to Congress: "To those of you who have advocated looking high we owe our sincere gratitude, for you have granted us the opportunity to see some of the grandest views."

While certainly not the lunar surface, all of our organizations are responsible for a large amount of infrastructure and assets. How much and what types are out there? Where is it located? What shape are they in? What needs to be replaced or maintained, and when? I'm guessing we all sometimes feel overwhelmed by these questions, almost like being asked for the current conditions on the moon.

That's where asset management systems come into play. Coupled with a GIS mapping system, they can really give you the "grandest view" of your community's infrastructure systems and assets. This data can be invaluable for budgeting, capital planning and maintenance scheduling, as well as for providing information to elected officials, department heads, nearby government jurisdictions, school corporations, neighborhood associations and the community at-large (and beyond) via your website.

The City of Bloomington Public Works Department has utilized Lucity asset management software since 2011. We subsequently upgraded from desktop only to a more versatile web interface version in 2018. Originally it was only used by the Street Division to track segment conditions and paving history data. However, use of this system expanded in 2018 when the Board of Public Works approved a contracted field inspection that utilized Light Detection and Ranging (LIDAR) technology. This effort produced real time data that included not only updated pavement PCI for all the City's 234 street lane miles, but also condition reports on sidewalks, signage, ADA ramps and curbs. What had typically taken several years to manually complete, and was done piecemeal due to time constraints, was finished in just months. All of the condition data was uploaded to our Lucity system and has proved extremely valuable for developing the annual paving schedule, as well as for overall capital planning purposes. As the data is now several years old, a new LIDAR field inspection is scheduled to be completed in 2021.

The Facilities Maintenance Division started using the system in 2018. Staff utilize the software on tablets for indexing a wide range of building conditions (roofs, HVAC, plumbing, mechanicals, etc.) for over 20 municipal facilities. This has become invaluable on coordinating capital replacements and facility repairs. It also was used to replace the former internal work order system that used paper printouts, which has significantly increased the ability to track data and metrics over time. The Fleet Division also is set to begin operations with the system early this year. It will be utilized for work orders, preventative maintenance scheduling (including both at the garage and in the field by Fleet Technicians using iPads), inventory reporting and budget planning.

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Like the Apollo 11 mission, these tools completely rely on the people using the system. Without a good team behind it, these systems won't be successful. We've found that continued learning, participation in software user groups and attendance at conferences (even if they're only virtual these days) are vital to staying current with the software. They also provide a great chance to interact with our state and local colleagues to learn more about their best practices. Both good internal discussion and coordination with your team to identify product needs and requirements are essential. Game planning ahead of time makes all the difference in getting the right software for your organization's needs.

If you have questions or want more details on Bloomington's experiences with asset management systems, you don't need to go to the moon. Feel free to call or e-mail me, always happy to chat.



The City of Bloomington asset management team at a conference in Kansas City, MO. 2019. Like most everyone, we're beyond ready for an in-person conference again!