



Creating A Map to Fuel Explosive Growth
Leveraging NISC's Expertise, Heber Light & Power
is 'Light Years Ahead' of Where They Were Before



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About

About a mile above sea level between Salt Lake City and Provo, Utah, lies Heber City, a small community located on the back side of the Wasatch Front Mountain Range of the Rocky Mountains. When it was incorporated in 1909, it was mainly a farming, ranching and sheep herding community, but as the years passed, its popularity as a recreation destination grew. Today, it is home to one of the largest ski resorts in the country and is filled with mountain biking trails and two large reservoirs for summer activities.



Exponential Growth Leads to Growing Pains

In 2002, when the Winter Olympics were held in and around Salt Lake City, spectators from around the world saw firsthand the beauty and peacefulness the area had to offer. “Word got out that it’s a quiet little place, and we have quite a few individuals from across the world who have quite a bit of money and have invested in a second home here,” said Bart Miller, CFO of Heber Light & Power, the interlocal government agency responsible for providing electricity to residents and businesses in Heber City, Midway and Charleston, Utah. “They come a couple times a year to escape, and we’re finding that as more and more people discover the value of the Wasatch back down to Heber City, we’re growing at an exponential rate.”

What started as manageable growth for Heber Light & Power rapidly began to explode, doubling over the past 10 years, and slated to double again in the next 10. Part of that growth





Exponential Growth Leads to Growing Pains

can be attributed to national developers seeing opportunities and successfully petitioning for the annexation of some 8,000 acres of land into Heber City. That land is currently under development, and more than 5,000 homes will be built over the next 5-10 years. Last year also saw construction begin on a Tiger Woods-designed 18-hole golf course, his first-ever mountaintop design. Growth like Heber Light & Power is experiencing obviously comes with benefits, including increased risk resilience, knowledge and adoption of new technologies and, of course, revenue growth. But with these benefits come challenges as well.

“Just five years ago, we were still drawing everything out in our previous software and calculating prices for new developments in a notebook,” said Jordan Behunin, Heber Light & Power’s Distribution System Planner. “Then I’d go back and compare it to documents from past projects because it’s almost impossible to remember everything you need to include.” Heber was using NISC products for several parts of their business, so the decision was made to implement NISC’s Mapping and Staking software to increase efficiencies and help make cost estimates easier.

But they soon realized that in order to utilize Mapping and Staking to its full potential and realize the efficiencies that were possible between departments through the NISC enterprise, they first needed an accurate GIS map.

“We needed the map to be 100% accurate,” said Riley Wright, Heber Light & Power’s Operations Manager. “We count on the maps. They’re very, very important for our jobs. And if they’re not right, there are definitely issues.”

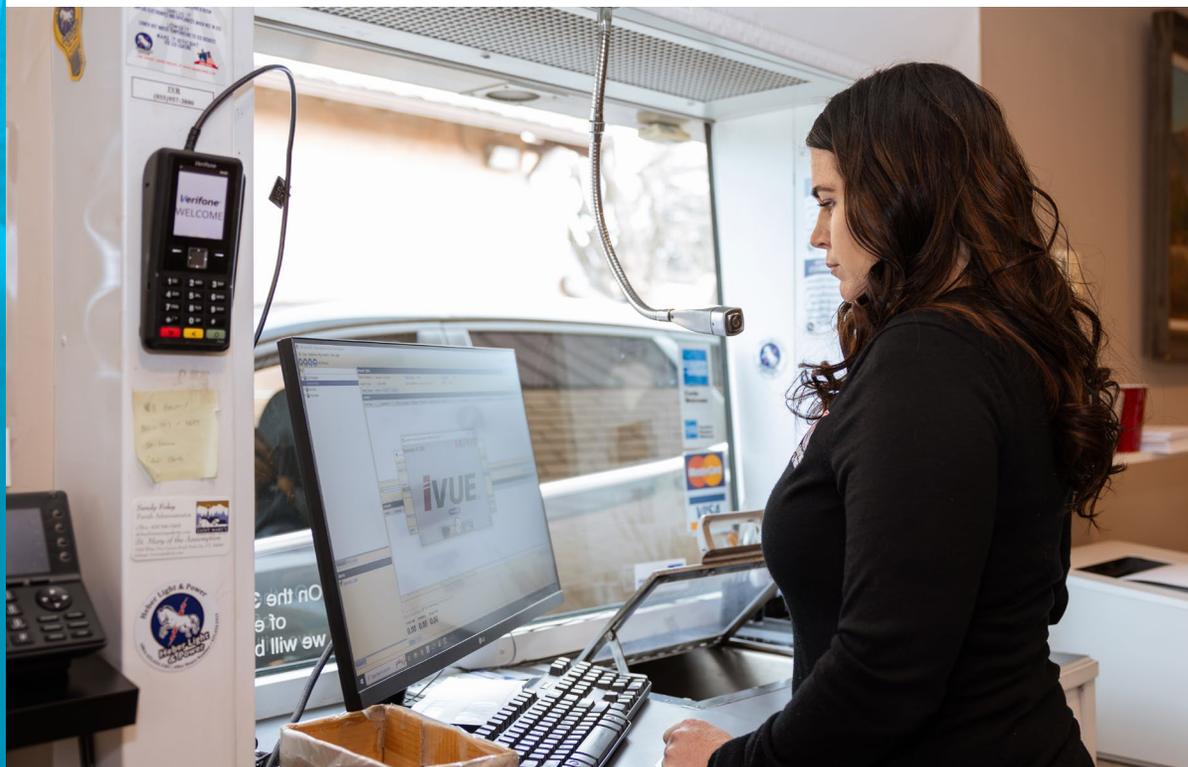
And that was the problem.



Flawed Data, Faulty Map

Heber Light & Power's GIS asset data has evolved from paper to multiple other formats prior to NISC, so the data was flawed prior to their conversion to Mapping and Staking. And because Heber Light & Power was not able to complete the data improvement prior to their conversion, a post-live data cleanup project was necessary.

“We had a map, but the state of the data was in such poor condition that it was unusable,” Behunin said. “It was basically just points and lines that didn’t show the flow of anything. If a pole was knocked down, the linemen couldn’t tell who it impacted. We were missing meters, transformers, assembly units and phasing. We needed to know what wire is connected to what point, what feeder and what substation and we didn’t have nearly enough staff to do all the cleanup that was necessary to make the map usable.”





Adapt, Support, Succeed

Enter NISC's Mapping Production Team, which exists to help Members improve their data, so they may leverage Mapping to the fullest and receive the most value. When Heber contacted them, they originally quoted the entire project which was standard procedure at the time, but difficult for Heber to budget for. "So we figured, we'll have to do this in house as much as possible," Behunin said. "Meanwhile, more developers are coming in trying to build, and we just couldn't keep up with the growth. And we had a project manager and myself doing all the staking and trying to keep up with the mapping and with everything out in the field. It was a lot."

Knowing Heber's situation, Don McKendry, Team Lead of the Mapping Production Team, proposed a pilot program with a more flexible approach that allowed Heber to commit to a small number of hours for NISC to showcase the cleanup process and the value that would result. "Don said, just give us 160 hours and we'll do as much as we can in that time, and that was great for us," Behunin said, "so we chose to go that route."

"When Damien (Finkbeiner, GIS Technician II) and Zac (Schweizer Lead GIS Technician III) showed us the part of the map they went through, we were like, 'this is the greatest thing ever,' because there's no way we were going to be able to do that," Behunin said. "We were able to continue working and tackling the challenges ahead of us that we barely had the manpower to do, and they worked on the map in the background."

After that first iteration of the pilot project, Heber signed a second contract for another block of hours. Then a third. After that, they asked for their transmission lines and substations to be added, which was the fourth phase of the project. About a year since the start of the project, they are now on a maintenance contract. They meet with the Mapping Production team once

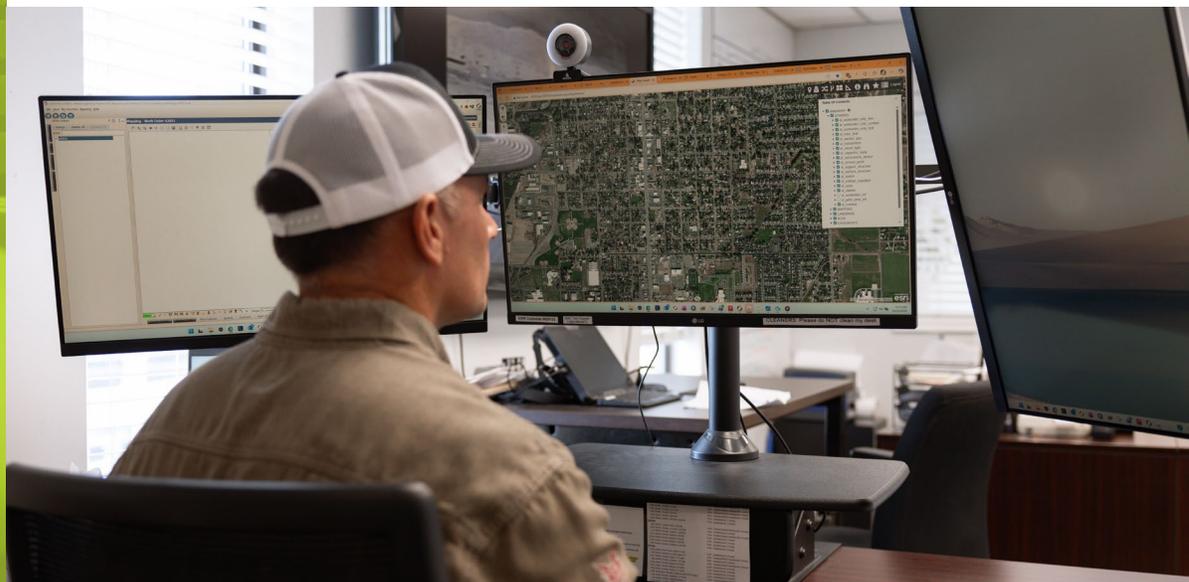


Adapt, Support, Succeed

a month with any questions, and the team shows the Heber employees how to do anything they don't know how to do or walks them through any issues they may have with the map.

“It’s been a really great partnership,” Behunin said. “We now have a living connectivity model that allows our staff to see up and downstream transformers or fuses, which helps determine where an outage is. The crews love that. Before it was a totally manual process, having to open boxes and check to see if equipment was working or not. Now, we can just click on a point and see everything and everyone who is affected in both directions from the substation to the customers. We’re light years ahead of where we were before.”

Having an accurate map is also critical to ensuring both the line crew’s safety and the reliability of the power they provide to their customers. “We often say that we’re only as good as our map,” Behunin said. “If line workers are in the field trying to make a critical decision and the map is wrong, the consequences could be bad. This map helps keep our linemen safe and the lights on.”



IV

Our Success is Their Success

Now that Heber's map is complete and accurate, they are able to utilize the Mapping and Staking solution, which has been extremely helpful when planning the system's growth. "It allows us to see what the system will look like when we're planning, and it is so helpful with cost estimation that we wouldn't consider any other software," Behunin said. "Some systems are on a bunch of different software, and they have to scab everything together – this is a one-stop shop. Our General Manager's goal was to get the whole system mapped out and inspected and since NISC did this for us, we're almost there. Now we can just add new assets as they are installed."

The completion of Heber Light & Power's mapping project hasn't only benefited one group; efficiencies can be seen across the entire organization. "It's been amazing how well we've already absorbed and recognized the value of this GIS project," Miller said. "It has allowed us to better understand our system and better dispatch our employees. In the office, we are now able to actually log in and see where things are happening and where we're down so we can dispatch crews to the correct locations. It has really benefited us quite a bit."

Customer Service Representative Rylee Allen said having the new map has made her job much easier, especially when dispatching service technicians. "Before, you would get on the map, and there would maybe be 20 meters all in one blob, and you weren't sure which building they were on and what they were connected to," she said. "Now instead of telling our techs that the meter is somewhere in a general area, especially with apartment buildings, we can tell them what side of the building it's on and what meter number they need to look for. It's shortened their call times quite a bit."

IV

Our Success is Their Success

Employees at Heber Light & Power agree that the GIS mapping project has benefitted every department, making them able to do their jobs safely and more efficiently. “We’re not living in silos anymore,” Behunin said. “It’s been huge to have the connection between the map and the rest of our information and database.”

Heber’s staff has very positive things to say about working with NISC’s Mapping Production team, saying they were great to work with, communicated well and were always available to answer questions and help wherever possible. And Miller said that is not something unique to this project.

“I have been here for every implementation of every module that we have brought on from NISC, which is everything except for OMS (Outage Management System) at this point, and I have been thoroughly impressed with the way the NISC does things,” Miller said. “It’s good to have a company alongside us that cares so much about our success that they’re willing to do whatever they can to help us get to where we need to be.”





Accurate mapping data drives functionality, efficiency and value across the enterprise, and Heber Light & Power has experienced benefits in every department as a result of its improved map.

Could your system benefit from a more accurate map, but you don't have the staff or expertise to complete a project of this size? NISC's Mapping Production team would love to talk with you. Call us at 866.999.6472 or visit nisc.coop.



866.999.6472



visit www.nisc.coop to learn more

