



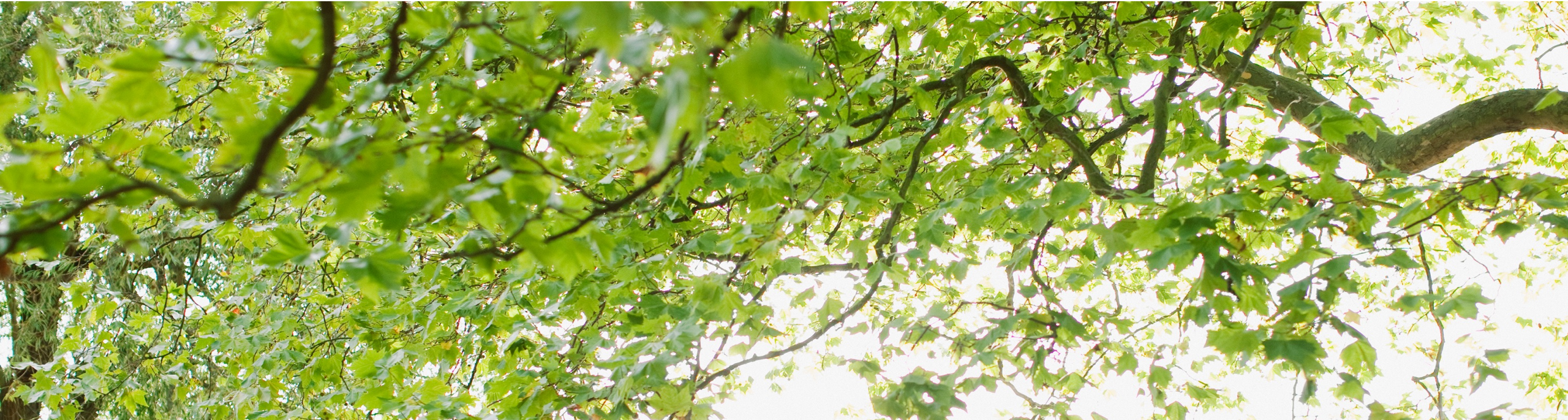
Metro Parks and Recreation Nashville Case Study

Automating Robotic Mowers with Software



SUMMARY

In this success story, we share how Metro Nashville Parks and Recreation (Metro) identified the clearest path to meeting sustainability goals set out by the Mayor's Office across the 15,134 acres of open space they oversee. The team knew a battery-operated landscape solution was the best approach but was not certain of the right direction given the unlimited options in the industry. The Metro team took advantage of My Goat's expertise and software to improve the chances of successfully deploying, operating, and optimizing robot auto mowers and solar charging stations at the Dell Soccer Complex.





ABOUT METRO PARKS AND RECREATION NASHVILLE

Nashville is the capital of the U.S. state of Tennessee and home to the Tennessee Titans professional football team. Nashville is the largest city in Tennessee and the 21st largest city in the United States. Across their 15,134 acres of responsibility, Metro Parks and Recreation Nashville maintains 178 parks and 99 miles of greenway.

PROBLEM

SUSTAINABILITY

The need to find achievable ways to meet published sustainability goals.

Achieve 20% carbon emissions by 2025

Achieve 100% carbon emissions by 2050

WORKFORCE

Finding sustainable technology that is easy to use for existing labor within Metro

FINANCIALS

Slowing the rising costs related to landscape management

\$68,000 per 5 acres

QUALITY OF SERVICE

Meeting quality of service standards while struggling with limited and unfilled job openings

“It is the mission of Metro Parks and Recreation to sustainably and equitably provide everyone in Nashville with an inviting network of parks and greenways that offer health, wellness, and quality of life through recreation, conservation, and community”.

Metro Parks and Recreation

CHALLENGE

Metro Parks and Recreation Nashville was looking for a way to begin their journey to sustainability by using affordable electric, robotic mowers and charging stations powered by solar panels. Unfortunately, the decision to move towards sustainability in the landscape arena is filled with unlimited technologies that may sound better than capable of delivering results. The Metro Parks and Recreation leadership also wanted a “simple-to-learn” solution to enable and empower existing employees versus hire PhD’s to manage a robotics program



SOLUTION

INSTALLATION

For the 5-acre soccer field, Pad 1, four equal sections of the 5-acre pad were designed and named Pen 1, Pen 2, Pen 3, and Pen 4. Each of these pens were created by installing underground wire to communicate with the robotic mowers (Goats) to confine their mowing within that Pen.



SOLUTION

TRAINING CERTIFICATION & OPERATIONS

Teresa from the Metro team owned the on-field program as the primary Technology Shepherd. My Goat provided her online training to help perform her responsibilities as well as a certification path to enable the skills to manage a robotic mower program at a significant scale. My Goat believes Metro can scale to manage 140 acres per every single fulltime employee with the software. Her duties would include:

Weekly/Bi-Weekly maintenance


- Brushing the goats to clear sensors of grass clippings
- Replacing the blades (similar to razor blades)

Taking actions driven by My Goat data to improve autonomy or optimization

- Fixing environmental challenges for areas the data predicts will require human intervention every week
- Maximizing grazing schedules to achieve desired results and stretch the robots to do more with the less capital spend
 - My Goat subscribes to using fewer robotic mowers to do more work using the data driven My Goat software to support this approach

Responding to alerts sent by My Goat software

- Alerts related to events that require addressing a stuck goat
- Alerts related to human intervention (goats were lifted, stopped, etc.)



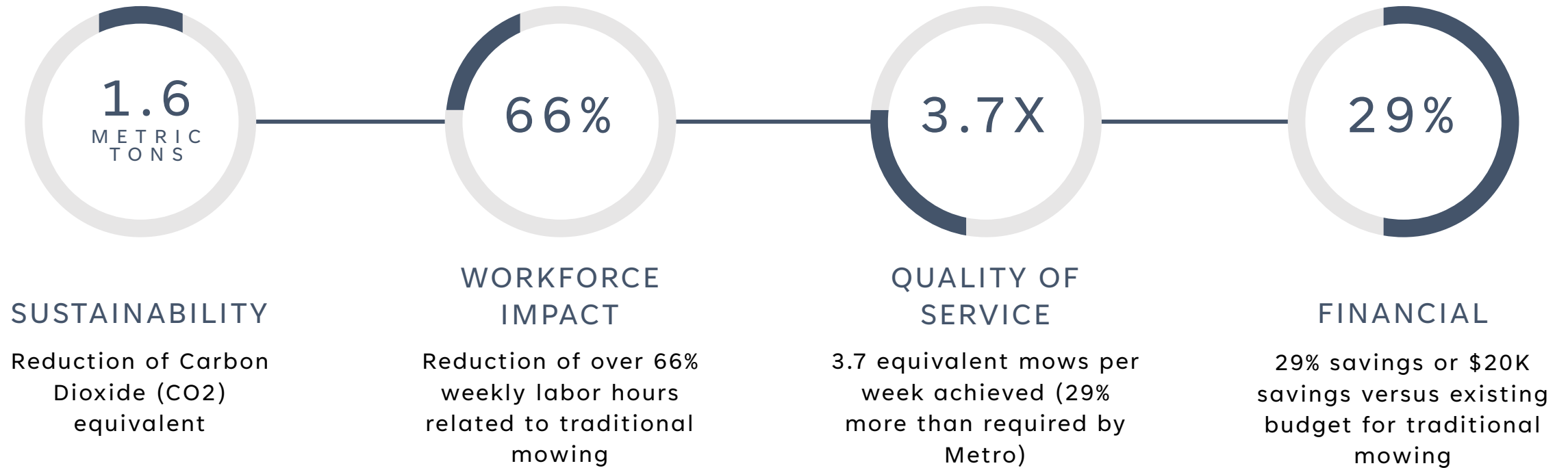
“This program allows me to think differently about who can participate in engaging with the robotic mowers. Sanitation team members at Metro can respond to a text alert from My Goat during their onsite shifts and restart goats with a 5 minute-training. This changes everything”


Rick Taylor

Former Director of Metro Parks and Recreation Nashville

SUCCESS

RETURNS – INITIAL 3 MONTHS of PROGRAM





FINAL THOUGHTS

Based upon the results of this program in 2022, Metro expects these metrics to continue during the next mowing seasons with the following expectations for an expanded program of **16** acres at Dell Soccer Complex.

