

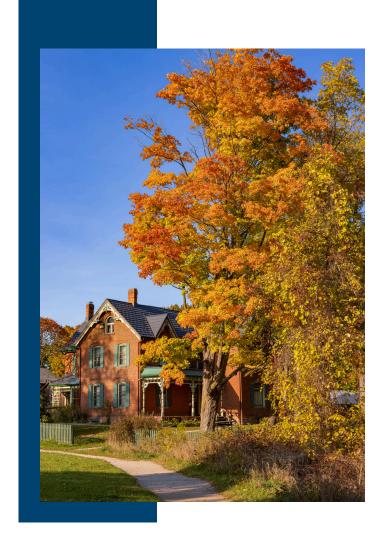
CASE STUDY

City of Burlington, Ontario

Transforming Urban Forestry with TreePlotter Integration

BACKGROUND

The City of Burlington, Ontario, is home to a thriving urban forest of roughly 80,000 trees. A dedicated team oversees planting, maintenance, invasive species management, and community engagement. As Burlington's population and service demands grew, it became clear that a more integrated, scalable approach to urban forest management was needed.



<u>PlanIT Geo</u> partnered with Burlington to deploy and enhance <u>TreePlotter</u>, our GIS-based urban forestry management platform, seamlessly integrating it with the city's proprietary Customer Relationship Management (CRM) system. This case study highlights the challenges, collaborative solutions, and outcomes of this integration, as <u>shared by Burlington's forestry team during a 2024 webinar</u>.

CHALLENGES

Scaling with Growth

With Burlington's population nearing 200,000, forestry-related service requests became more frequent and complex. The city needed a unified, city-wide system for tracking, accountability, and reporting.

Contractor Management

Similar to many municipalities, Burlington initially managed contractor work using paper or Excel, limiting real-time oversight and efficiency.

Fragmented Data and Workflows

Before Burlington's integration, forestry operations relied on separate Service systems. requests managed through a text-heavy CRM, while asset and contractor management occurred in TreePlotter. This led to inefficiencies, duplicated data entry, and communication gaps across departments and contractors.

Change Management

Transitioning staff and contractors to new digital workflows required thorough process mapping, documentation, and training.

PLANNING THE INTEGRATION AND IMPLEMENTATION

Process Mapping and Stakeholder Engagement

Led by Kyle McLaughlin and Laura Wright, Burlington's forestry team conducted detailed process mapping to document every step in their service request and work order workflows. This was essential for both successful API development and organizational change management.

Knowledge Base Articles (KBAs) were created for call center staff, ensuring consistent responses to public inquiries and smooth escalation to forestry experts as needed.



API DEVELOPMENT

PlanIT Geo worked closely with Burlington's IT and project management teams to create a two-way API between the city's CRM and TreePlotter.

- **Inbound:** Service requests entered via CRM (by residents or call center staff) are automatically populated into TreePlotter, geo-referenced, and assigned to the appropriate team.
- **Outbound:** Status updates and notes made in TreePlotter are pushed back to the CRM, keeping residents and staff informed, eliminating duplicate work, saving staff/team 30 hours a week in data entry..

The integration process—including procurement, development, testing, and rollout—was completed over 18–24 months, with steady progress and ongoing teamwork making each stage manageable and rewarding.

DAY-TO-DAY USE OF THE INTEGRATION

Digital Workflows for Program Management and Contractors

Service Requests: Residents submit requests (e.g., tree planting, pruning, removal) via the city's online portal or call center. These requests are triaged and mapped in TreePlotter for field assessment.

Work Orders: Verified requests are converted into actionable work orders within TreePlotter, assigned to city staff or contractors as appropriate.

Contractor Portal: Contractors receive work orders directly through TreePlotter, limited to their assigned projects. They update completion status and notes, triggering the next steps in quality control (QC) and invoicing.

Quality Control: Student staff or supervisors conduct field QC, updating TreePlotter with results. Failed items are automatically routed back to contractors for correction.

Mass Updates and Reporting: At the end of each planting or maintenance cycle, bulk updates are performed in TreePlotter to record final tree attributes, warranty periods, and close out work orders. All data remains accessible for future reference and reporting.

A Day in the Life: John's Downed Branch

One morning, John notices a large branch from the city tree in his front yard has fallen after a storm. Unsure what to do, he visits the city's online portal and quickly submits a service request, describing the issue and providing his address.

Within minutes, John's request is routed through TreePlotter, where it's geomapped and triaged by the city's forestry team. A staff member reviews the request and schedules a field assessment to confirm the situation. After visiting John's property, the team verifies the need for removal and creates a work order in TreePlotter.

The work order is then assigned to a contractor, who receives the details directly through their dedicated portal. The contractor heads out, clears the branch, and updates the work order status and notes in TreePlotter letting the city know the job is complete.

Next, a supervisor or student staff member conducts a quick quality control check to confirm that the work meets city standards. If everything looks good, the work order is closed. If not, TreePlotter automatically routes the job back to the contractor for follow-up.

Throughout the process, John can check the status of his request, and city staff stay in sync, ensuring issues like his are resolved efficiently and everyone's time is used where it matters most: caring for the community's trees.

PROGRAM OUTCOMES AND BENEFITS

Operational Efficiency

- TreePlotter enables scalable tree care management, with clear assignment, progress tracking, and quality assurance workflows.
- <u>Automated data flows between CRM and TreePlotter</u> eliminated redundant data entry, reduced errors, and freed up staff time for higher-value tasks.
- Real-time visibility provides all stakeholders, including city staff, contractors, and call
 center personnel, <u>up-to-date access to service requests and work order statuses</u>,
 improving communication and accountability.

If we didn't have TreePlotter, it would be a much bigger challenge just to communicate across the board. Now, with the API, there's no lag time requests are populated immediately, and all updates flow seamlessly between systems. It's quite beautiful and smooth.

— Kyle McLaughlin, Supervisor of Forest Planning and Health, City of Burlington, ON

Enhanced Accountability and Reporting

- The integrated system empowers Burlington to quantify service demand, supporting budget requests and resource allocation. For example, the urban forestry department was able to demonstrate it receives more service requests than any other city department, strengthening its case for increased staffing and funding.
- TreePlotter's integration supports
 <u>community engagement</u> and <u>public-facing programs</u>, such as <u>tree giveaways</u> and community planting events, with locations and progress tracked in real-time.

Change Management and Training

- Detailed process maps and KBAs ensure continuity despite staff turnover and support onboarding of new team members and contractors.
- The city's experience underscores the importance of patience and iterative refinement during rollout, as well as the value of hands-on technical workshops for users.



LESSONS LEARNED AND RECOMMENDATIONS

- **Process Mapping is Essential**: Understanding existing workflows is critical before system integration. This ensures the technology solution aligns with operational realities and supports succession planning.
- **Expect and Plan for Iteration**: The initial integration will require troubleshooting and adjustments, especially for features such as priority notifications and contractor permissions.
- Stakeholder Communication: Regular engagement with all user groups (staff, contractors, IT, and call center) is vital for successful adoption and ongoing improvement.
- **Scalability**: Burlington's approach can be applied to other municipalities seeking to modernize their urban forestry operations through integrated digital platforms.



TECHNOLOGY TRANSFORMING URBAN FORESTRY

The partnership between PlanIT Geo and the City of Burlington is a testament to what's possible when innovative technology meets passionate people. By integrating asset management and CRM systems through TreePlotter, Burlington didn't just streamline workflows or improve data quality, they completely transformed how their team works.

TreePlotter empowered the forestry team to overhaul their operations, making processes more efficient and enabling them to secure a larger budget for the city's green future. Most importantly, it freed up staff to focus on what truly matters: caring for trees, supporting community programs, and maintaining Burlington's neighborhoods as safe and vibrant as possible.

With less time spent on data entry and more time devoted to meaningful work, the team could fully engage with residents and invest in the health of the city's urban forest. This is the real promise of great software removing barriers so people can do their best work and make a lasting impact. **Burlington's success sets a new standard for cities everywhere, proving that with the right tools and collaboration, urban forestry teams can achieve more for their communities and the environment.**





<u>Get in touch with us</u> to find out how TreePlotter can help you achieve more and watch the webinar about this project here:

