

Technology is transforming our industry, so let's make some time to talk about it. The Trees and Tech Summit is an opportunity to engage a global concentration of experts and practitioners in a discussion of technology, data, trees, and the future of urban forestry decision-making. This event looks towards the future and the pioneering technology that will shape it, but with both feet firmly planted in the present. Presenters will showcase how modern approaches to common urban forestry challenges can be implemented now, with case studies and actionable steps for igniting these changes.

Join us for this full-day event of presentations, panel Q&A, and collaborative discussions to take part in building the future of urban forestry together.

# **AGENDA**

11:00 - 12:00	DOORS OPEN -	<ul> <li>LUNCH.</li> </ul>	, NETWORKING
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# 12:00 - 12:25 WELCOME ADDRESS - IAN HANOU, PLANIT GEO

# 12:30 - 2:10 REMOTE SENSING TECH

- · Why We Ranked World's Cities On Green Space Erik Swan, HUGSI
- Mapping Tree Equity Jake Simon, American Forests
- Lexington and Canopy Data Heather Wilson, City of Lexington
- Panel discussion with speakers

# 2:25 - 4:05 ON THE GROUND TECH

- Leveraging Tree Inventory Data in Albuquerque Sean O'Neill, Albuquerque City Forester and Rocky Yosek, PlanIT Geo
- A Multi-Year Volunteer Tree Inventory Project In Santa Fe Athena Beshur, Seeds of Wisdom
- From Tree to Board: Leveraging Asset Data Across the Tree Lifecycle- Joe McDonald, Cambium Carbon
- · Panel discussion with speakers

# 4:20 - 6:00 INNOVATIVE EQUIPMENT

- Tree Root Quality Assessment with GPR INSIGHT™ Marie Ambusk, Trees ROI
- Monitoring for Survival Roman Franzia, ePlant
- Drones Applications In Urban Forestry Greg Howe, Arapahoe County
- Panel discussion with speakers

6:00-6:10	CLOSING REMARKS - IAN HANOU, PLANIT GEO
6:10- 8:00	NETWORKING HAPPY HOUR AND DINNER





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# 11:00 - 11:55 Doors Open, Networking, Lunch

#### 12:00 - 12:25 Welcome Address

<u>Ian Hanou, PlanIT Geo</u> -Ian will kick off Trees and Tech Summit, including an explanation of the format and details for the rest of the day. The presentation will cover the general evolution of urban forestry technology, and how granular sensor readings all the way up to satellite imagery work together to support greener cities. Ian will speak on the exciting innovations around the corner, and appeal for attendees to offer up their feedback throughout the day on how technology can better support their needs.

## 12:30 - 2:10 Block 1: Remote Sensing Tech

#### 12:30-12:50 Why We Ranked World's Cities On Green Space

<u>Erik Swan, HUGSI</u> - Since 2019, HUGSI (Husqvarna Urban Green Space Index) has annually quantified the greenness of a growing number of cities around the world through Al-powered analysis of satellite images. This data is shared with cities along with an annual report showcasing the top-performing cities on a range of metrics. This presentation will showcase the platform and how its outputs are being used to encourage cities to safeguard and grow urban green areas

#### 12:55-1:15 Tree Equity: What Gets Measured, Gets Managed

<u>Jake Simon, American Forests</u>- American Forest's Tree Equity Score helped inspire conversations around the country on why maps of tree cover are too often a map of race and income too. This unacceptable truth is out in the open now. This presentation will demonstrate how the Tree Equity Score Analyzer (TESA) supports cities and states that want to dive deep into decision-making around tree equity and start correcting the canopy imbalance.

### 1:20-1:40 Putting Canopy Data To Work in Lexington, Kentucky

<u>Heather Wilson, City of Lexington</u> - Lexington, Kentucky, USA completed an urban tree canopy assessment in 2022, which coincided with support from within the city government and a large network of stakeholders to measure and expand Lexington's urban forest. This presentation will outline how the city is using canopy data to promote equitable canopy expansion, back up department initiatives, and improve communications with government leaders.

#### 1:40 - 2:10 Remote Sensing Tech Panel Discussion

All section speakers will be brought on stage for a moderated discussion and audience Q&A.

### 2:10-2:25 Break

### 12:30 - 2:10 Block 2: On The Ground Tech

#### 2:25-2:45 Putting Tree Inventory Data To Work in Albuquerque

<u>Sean O'Neill, Albuquerque City Forester and Rocky Yosek, PlanIT Geo</u>- A tree inventory is a powerful tool for an urban forest program, but having a sudden motherload of tree data, where there used to be zilch, presents a serious challenge for charting a new, informed course forward. This presentation will walk through how Albuquerque, NM, USA is putting its recently completed park tree inventory of 25,000 trees to work. Presenter Sean O'Neill and Rocky Yosek will discuss the full spectrum of the process and the challenges faced along the way, including how the city has utilized this data to move from a reactive management position to a proactive approach allowing the city to take action, track progress, and plan for the future by utilizing and updating data along the way.





#### 2:50-3:10 A Multi-Year Volunteer Tree Inventory Project In Santa Fe

Athena Beshur, Seeds of Wisdom- The Santa Fe Public Spaces Tree Inventory Project has been inventorying trees in Santa Fe parks for 7 years running, using volunteers largely from the Santa Fe Extension Master Gardeners. The data from this project is shared with the Parks Division for maintenance, funding, and support, and has been used to communicate with the mayor and other community groups. This presentation will outline how this volunteer program evolved from a paper-and-pencil operation to its current digital form and the impacts of inventory data for the city and community.

#### 3:15-3:35 From Tree to Board: Leveraging Asset Data Across the Tree Lifecycle

Joe McDonald, Cambium Carbon- This session will explore bridging the gap between digital and physical asset management across the tree care and lumber industries. It is becoming increasingly important to understand the origin data and destination of our materials; this talk will discuss the challenges and opportunities in enabling wood salvage from urban forest management activities. Cambium Carbon will present its Traece™ software, which facilitates full lifecycle asset management from tree to log to board, using a "bottom-up" data approach to establish a transparent chain of custody. The platform also features a built-in impact calculator to quantify critical sustainability metrics, such as carbon storage within salvaged wood products. The presentation will showcase two case studies of Traece™ platform utilization by arborists and sawyers, allowing for seamless connectivity and real-time tracking of material across stages of production.

#### 3:35 - 4:05 On the Ground Tech Panel Discussion

All section speakers will be brought on stage for a moderated discussion and audience Q&A.

#### 4:05-4:20 Break

# 4:20-6:00 Block 3: Innovative Equipment

#### 4:20-4:40 Tree Root Quality Assessment with GPR INSIGHT™

Marie Ambusk, Trees ROI - WHAT IF we could image the trees' root structure to identify potential problems? WHAT IF we could develop a system to help increase the life span of urban trees? We give you INSIGHT™ ... a novel, NDT method of using ground penetrating radar (GPR) empowered by cutting-edge AI/ML software programs. Our 3D-GPR-Tree-CT system will inspect and assess the quality of tree root systems above ground, before planting. Our system will be easy-to-use, meaningful, cost-effective, and address a problem that WE CREATED, at the Root Of It (ROI)! The societal impact of our innovation enables critical quality metric measurements during nursery production that result in higher quality planted tree stock growing roots as nature intended. At scale, the intrinsic value of INSIGHT™ is a predictive model to increase the life span of nursery stock trees to grow, thrive, and benefit people in the urban landscape - where we live.

#### 4:45-5:05 Monitoring for Survival

<u>Roman Franzia, ePlant</u> - There are challenges in maintaining and growing an urban forest. Irrigation, vandalism, and climate species selection, among others. Can technology be better applied to improve the outcomes? We introduce IoT (Internet of Things) solutions that are a cost-effective way to provide critical care data and community engagement systems to help deliver that care.

#### 5:10-5:30 Drones Applications In Urban Forestry

<u>Greg Howe, Arapahoe County</u>- This session will discuss how drone and NDVI (Normalized Difference Vegetation Index) data gathering technologies are being implemented for forestry in the public and private sectors. Attendees will learn how this technologies are being applied to land mapping, NDVI - Plant Health remote sensing, tree inspections, and construction monitoring.

#### 5:30-6:00 Innovative Equipment Panel Discussion

All section speakers will be brought on stage for a moderated discussion and audience Q&A.

# 6:00-6:10 Closing Remarks

lan Hanou, PlanIT Geo

# 6:10-8:00 Networking, Drinks, and Dinner