City of Fayetteville Staff Review Form

2022-0463

Legistar File ID

6/21/2022

City Council Meeting Date - Agenda Item Only

N/A for Non-Agenda Item

John J. Scott	5/19/2022	PARKS & RECREATION (520)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Staff recommends approval of a contract with PlanITGeo (RFQ 22-01 #1) for work to produce a ten-year Urban Forestry plan for the City for a contract cost of $73,550.00 plus a $4000 project contingency.

Budget Impact:

4470.520.8520-5314.00	Sales Tax Cap Imp
Account Number	Fund
02045.1201	Urban Forest Analysis
02045.2201	2022 Urban Forest Analysis
Project Number	Project Title

Budgeted Item?	Yes	Current Budget	$	83,377.00
		Funds Obligated	$	-
		Current Balance	**$**	**83,377.00**
Does item have a cost?	Yes	Item Cost	$	73,550.00
Budget Adjustment Attached?	No	Budget Adjustment	$	-
		Remaining Budget	**$**	**9,827.00**

V20210527

Purchase Order Number:

Previous Ordinance or Resolution #

Change Order Number:

Approval Date:

Original Contract Number:

Comments:

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO

MEETING OF JUNE 21, 2022

TO: Mayor and City Council

THRU: Susan Norton, Chief of Staff
Alison Jumper, Parks, Natural Resources and Cultural Affairs Director
Ted Jack, Park Planning Superintendent

FROM: John Scott, Urban Forester

DATE: May 16, 2022

SUBJECT: **Approval of a Contract with PlanIt Geo for an Urban Forestry Assessment and Plan**

RECOMMENDATION:
Staff recommends approval of a contract with PlanITGeo (RFQ 22-01 #1) for work to produce a ten-year Urban Forestry plan for the City for a contract cost of $73,550.00 plus a $4000 project contingency.

BACKGROUND:
PlanIT Geo, was selected from RFQ 22-01 to assist the city in creating an Urban Forestry Inventory, Assessment, and Management Plan per Chapter 167.03 of the Development Code. Code requires the plan to be updated every ten years. The new inventory, assessment, and management plan will review and update the vision, mission, goals and objectives for the next ten years. It will address the strengths, weaknesses, challenges, and opportunities for the entire Urban Forestry program.

DISCUSSION:
There has been a great deal of change in the city and the needs of Urban Forestry since the 2012 Urban Forestry Plan was completed. Among other areas this plan will look at how the city takes care of its Urban Forest, how development and land use changes are affecting the urban forest, how climate change will affect tree species selection, and what future goals should be for the overall canopy. Also, the plan will review current city practices involving Urban Forestry work and look for efficiencies and improvements to those practices.

BUDGET/STAFF IMPACT:
Funding for this project comes is available in projects 02045.1201 (Urban Forest Analysis) and 02045.2201 (Urban Forest Analysis – 2022) in 4470.520.8520-5314.00 (Professional Services). Staff time will be utilized in completing this plan.

Attachments:
SRF
Contract with Scope of Services

AGREEMENT
For
PROFESSIONAL SERVICES
Between
CITY OF FAYETTEVILLE, ARKANSAS
And
PLANIT GEO, INC.

THIS AGREEMENT is made as of _____, 2022, by and between City of Fayetteville, Arkansas, acting by and through its Mayor (hereinafter called CITY OF FAYETTEVILLE or CITY) and PLANIT GEO, INC. (hereinafter called PLANIT GEO).

WHEREAS, the CITY OF FAYETTEVILLE selected PLANIT GEO utilizing its competitive review of statements of qualification under RFQ 22-01, Engineering & Architectural Services, and

WHEREAS, the CITY OF FAYETTEVILLE from time to time requires professional services in connection with the engineering, evaluation, design, and/or construction supervision of capital improvement projects. Therefore, CITY OF FAYETTEVILLE and PLANIT GEO in consideration of their mutual covenants agree as follows:

PLANIT GEO shall serve as CITY OF FAYETTEVILLE's professional engineering consultant in those assignments to which this Agreement applies, and shall give consultation and advice to CITY OF FAYETTEVILLE during the performance of PLANIT GEO's services.

SECTION 1 - AUTHORIZATION OF SERVICES

1.1 Services on any assignment shall be undertaken only upon written Authorization of CITY OF FAYETTEVILLE and agreement of PLANIT GEO.

1.2 Assignments may include services described hereafter as Basic Services or as Additional Services of PLANIT GEO.

1.3 Changes, modifications or amendments in scope, price or fees to this contract shall **not** be allowed without a formal contract amendment approved by the Mayor and the City Council **in advance** of the change in scope, costs, fees, or delivery schedule.

SECTION 2 - BASIC SERVICES OF ENGINEER

2.1 Perform professional services in connection with the Project as hereinafter stated.

2.1.1 The Scope of Services to be furnished by PLANIT GEO during the Project is included in Appendix A attached hereto and made part of this Agreement.

2.2 PLANIT GEO shall coordinate their activities and services with the CITY OF FAYETTEVILLE. PLANIT GEO and CITY OF FAYETTEVILLE agree that PLANIT GEO has full responsibility for the services.

SECTION 3 - RESPONSIBILITIES OF CITY OF FAYETTEVILLE

3.1 CITY OF FAYETTEVILLE shall, within a reasonable time, so as not to delay the services of PLANIT GEO.

3.1.1 Provide full information as to CITY OF FAYETTEVILLE's requirements for the Project.

3.1.2 Assist PLANIT GEO by placing at PLANIT GEO's disposal all available information pertinent to the assignment including previous reports and any other data relative thereto.

3.1.3 Assist PLANIT GEO in obtaining access to property reasonably necessary for PLANIT GEO to perform its services under this Agreement.

3.1.4 Examine all studies, reports, sketches, cost opinions, proposals, and other documents presented by PLANIT GEO and render in writing decisions pertaining thereto.

3.1.5 The City's Urban Forester is the CITY OF FAYETTEVILLE's project representative with respect to the services to be performed under this Agreement. The Urban Forester shall have complete authority to transmit instructions, receive information, interpret and define CITY OF FAYETTEVILLE's policies and decisions with respect to materials, equipment, elements and systems to be used in the Project, and other matters pertinent to the services covered by this Agreement.

3.1.6 CITY OF FAYETTEVILLE and/or its representative will review all documents and provide written comments to PLANIT GEO in a timely manner.

SECTION 4 - PERIOD OF SERVICE

4.1 This Agreement will become effective upon the first written notice by CITY OF FAYETTEVILLE authorizing services hereunder.

4.2 The provisions of this Agreement have been agreed to in anticipation of the orderly progress of the Project through completion of the services stated in the Agreement. PLANIT GEO will proceed with providing the authorized services immediately upon receipt of written authorization from CITY OF FAYETTEVILLE. Said authorization shall include the scope of the services authorized and the time in which the services are to be completed. The anticipated schedule for this project is included as Appendix A.

SECTION 5 - PAYMENTS TO PLANIT GEO

5.1 The maximum not-to-exceed amount authorized for this Agreement is **$73,550.00 US DOLLARS**. The CITY OF FAYETTEVILLE shall compensate PLANIT GEO based on a Not To Exceed Price as described in Appendix A.

5.2 Statements

5.2.1 Monthly statements for each calendar month shall be submitted to CITY OF FAYETTEVILLE or such parties as CITY OF FAYETTEVILLE may designate for professional services consistent with PLANIT GEO's normal billing schedule. Once established, the billing schedule shall be maintained throughout the duration of the Project. Applications for payment shall be made in accordance with a format to be developed by PLANIT GEO and approved by CITY OF FAYETTEVILLE. Applications for payment shall be accompanied each month by the updated project schedule as the basis for determining the value earned as the work is accomplished. Final payment for professional

services shall be made upon CITY OF FAYETTEVILLE's approval and acceptance with the satisfactory completion of the study and report for the Project.

5.3 Payments

5.3.1 All statements are payable upon receipt and due within thirty (30) days. If a portion of PLANIT GEO's statement is disputed by CITY OF FAYETTEVILLE, the undisputed portion shall be paid by CITY OF FAYETTEVILLE by the due date. CITY OF FAYETTEVILLE shall advise PLANIT GEO in writing of the basis for any disputed portion of any statement. CITY OF FAYETTEVILLE will make reasonable effort to pay invoices within 30 days of date the invoice is approved, however, payment within 30 days is not guaranteed.

5.4 Final Payment

5.4.1 Upon satisfactory completion of the work performed under this Agreement, as a condition before final payment under this Agreement, or as a termination settlement under this Agreement, PLANIT GEO shall execute and deliver to CITY OF FAYETTEVILLE a release of all claims against CITY OF FAYETTEVILLE arising under or by virtue of this Agreement, except claims which are specifically exempted by PLANIT GEO to be set forth therein. Unless otherwise provided in this Agreement or by State law or otherwise expressly agreed to by the parties to this Agreement, final payment under this Agreement or settlement upon termination of this Agreement shall not constitute a waiver of CITY OF FAYETTEVILLE's claims against PLANIT GEO or his sureties under this Agreement or applicable performance and payment bonds, if any.

SECTION 6 - GENERAL CONSIDERATIONS

6.1 Insurance

6.1.1 During the course of performance of these services, PLANIT GEO will maintain (in United States Dollars) the following minimum insurance coverages:

Type of Coverage	Limits of Liability
Workers' Compensation	Statutory
Employers' Liability	$500,000 Each Accident
Commercial General Liability	
Bodily Injury and Property Damage	$1,000,000 Combined Single Limit
Automobile Liability:	
Bodily Injury and Property Damage	$1,000,000 Combined Single Limit
Professional Liability Insurance	$1,000,000 Each Claim

PLANIT GEO will provide to CITY OF FAYETTEVILLE certificates as evidence of the specified insurance within ten days of the date of this Agreement and upon each renewal of coverage.

6.1.2 CITY OF FAYETTEVILLE and PLANIT GEO waive all rights against each other and their officers, directors, agents, or employees for damage covered by property insurance during and after the completion of PLANIT GEO's services.

6.2 Professional Responsibility

6.2.1 PLANIT GEO will exercise reasonable skill, care, and diligence in the performance of PLANIT GEO's services and will carry out its responsibilities in accordance with customarily accepted professional practices. CITY OF FAYETTEVILLE will promptly report to PLANIT GEO any defects or suspected defects in PLANIT GEO's services of which CITY OF FAYETTEVILLE becomes aware, so that PLANIT GEO can take measures to minimize the consequences of such a defect. CITY OF FAYETTEVILLE retains all remedies to recover for its damages caused by any negligence of PLANIT GEO.

6.3 Cost Opinions and Projections

6.3.1 Cost opinions and projections prepared by PLANIT GEO relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results are based on PLANIT GEO's experience, qualifications, and judgment as a design professional. Since PLANIT GEO has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction Contractors' procedures and methods, unavoidable delays, construction Contractors' methods of determining prices, economic conditions, competitive bidding or market conditions, and other factors affecting such cost opinions or projections, PLANIT GEO does not guarantee that actual rates, costs, performance, schedules, and related items will not vary from cost opinions and projections prepared by PLANIT GEO.

6.4 Changes

6.4.1 CITY OF FAYETTEVILLE shall have the right to make changes within the general scope of PLANIT GEO's services, with an appropriate change in compensation and schedule only after Fayetteville City Council approval of such proposed changes and, upon execution of a mutually acceptable amendment or change order signed by the Mayor of the CITY OF FAYETTEVILLE and the duly authorized officer of PLANIT GEO.

6.5 Termination

6.5.1 This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given:

6.5.1.1 Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,

6.5.1.2 An opportunity for consultation with the terminating party prior to termination.

6.5.2 This Agreement may be terminated in whole or in part in writing by CITY OF FAYETTEVILLE for its convenience, provided that PLANIT GEO is given:

6.5.2.1 Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,

6.5.2.2 An opportunity for consultation with the terminating party prior to termination.

6.5.3 If termination for default is effected by CITY OF FAYETTEVILLE, an equitable adjustment in the price provided for in this Agreement shall be made, but

6.5.3.1 No amount shall be allowed for anticipated profit on unperformed services or other work,

6.5.3.2 Any payment due to PLANIT GEO at the time of termination may be adjusted to cover any additional costs to CITY OF FAYETTEVILLE because of PLANIT GEO's default.

6.5.4 If termination for default is effected by PLANIT GEO, or if termination for convenience is effected by CITY OF FAYETTEVILLE, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to PLANIT GEO for services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by PLANIT GEO relating to commitments which had become firm prior to the termination.

6.5.5 Upon receipt of a termination action under Paragraphs 6.5.1 or 6.5.2 above, PLANIT GEO shall:

6.5.5.1 Promptly discontinue all affected work (unless the notice directs otherwise),

6.5.5.2 Deliver or otherwise make available to CITY OF FAYETTEVILLE all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by PLANIT GEO in performing this Agreement, whether completed or in process.

6.5.6 Upon termination under Paragraphs 6.5.1 or 6.5.2 above CITY OF FAYETTEVILLE may take over the work and may award another party an agreement to complete the work under this Agreement.

6.5.7 If, after termination for failure of PLANIT GEO to fulfill contractual obligations, it is determined that PLANIT GEO had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of CITY OF FAYETTEVILLE. In such event, adjustments of the agreement price shall be made as provided in Paragraph 6.5.4 of this clause.

6.6 Delays

6.6.1 In the event the services of PLANIT GEO are suspended or delayed by CITY OF FAYETTEVILLE or by other events beyond PLANIT GEO's reasonable control, PLANIT GEO shall be entitled to additional compensation and time for reasonable costs incurred by PLANIT GEO in temporarily closing down or delaying the Project.

6.7 Rights and Benefits

6.7.1 PLANIT GEO's services will be performed solely for the benefit of CITY OF FAYETTEVILLE and not for the benefit of any other persons or entities.

6.8 Dispute Resolution

6.8.1 Scope of Paragraph: The procedures of this Paragraph shall apply to any and all disputes between CITY OF FAYETTEVILLE and PLANIT GEO which arise from, or in any way are related to, this Agreement, including, but not limited to the interpretation of this Agreement, the enforcement of its terms, any acts, errors, or omissions of CITY OF FAYETTEVILLE or PLANIT GEO in the performance of this Agreement, and disputes concerning payment.

6.8.2 Exhaustion of Remedies Required: No action may be filed unless the parties first negotiate. If timely Notice is given under Paragraph 6.8.3, but an action is initiated prior to exhaustion of these procedures, such action shall be stayed, upon application by either party to a court of proper jurisdiction, until the procedures in Paragraphs 6.8.3 and 6.8.4 have been complied with.

6.8.3 Notice of Dispute

6.8.3.1 For disputes arising prior to the making of final payment promptly after the occurrence of any incident, action, or failure to act upon which a claim is based, the party seeking relief shall serve the other party with a written Notice.

6.8.3.2 For disputes arising within one year after the making of final payment, CITY OF FAYETTEVILLE shall give PLANIT GEO written Notice at the address listed in Paragraph 6.14 within thirty (30) days after occurrence of any incident, accident, or first observance of defect or damage. In both instances, the Notice shall specify the nature and amount of relief sought, the reason relief should be granted, and the appropriate portions of this Agreement that authorize the relief requested.

6.8.4 Negotiation: Within seven days of receipt of the Notice, the Project Managers for CITY OF FAYETTEVILLE and PLANIT GEO shall confer in an effort to resolve the dispute. If the dispute cannot be resolved at that level, then, upon written request of either side, the matter shall be referred to the President of PLANIT GEO and the Mayor of CITY OF FAYETTEVILLE or his designee. These officers shall meet at the Project Site or such other location as is agreed upon within 30 days of the written request to resolve the dispute.

6.9 CITY OF FAYETTEVILLE represents that it has sufficient funds or the means of obtaining funds to remit payment to PLANIT GEO for services rendered by PLANIT GEO.

6.10 Publications

6.10.1 Recognizing the importance of professional development on the part of PLANIT GEO's employees and the importance of PLANIT GEO's public relations, PLANIT GEO may prepare publications, such as technical papers, articles for periodicals, and press releases, pertaining to PLANIT GEO's services for the Project. Such publications will be provided to CITY OF FAYETTEVILLE in draft form for CITY OF FAYETTEVILLE's advance review. CITY OF FAYETTEVILLE shall review such drafts promptly and provide CITY OF FAYETTEVILLE's comments to PLANIT GEO CITY OF FAYETTEVILLE may require deletion of proprietary data or confidential information from such publications, but otherwise CITY OF FAYETTEVILLE will not unreasonably withhold approval. The cost of PLANIT GEO's activities pertaining to any such publication shall be for PLANIT GEO's account.

6.11 Indemnification

6.11.1 CITY OF FAYETTEVILLE agrees that it will require all construction Contractors to indemnify, defend, and hold harmless CITY OF FAYETTEVILLE and PLANIT GEO from and against any and all loss where loss is caused or incurred or alleged to be caused or incurred in whole or in part as a result of the negligence or other actionable fault of the Contractors, or their employees, agents, Subcontractors, and Suppliers.

6.12 Ownership of Documents

6.12.1 All documents provided by CITY OF FAYETTEVILLE including original drawings, CAD drawings, estimates, field notes, and project data are and remain the property of CITY OF FAYETTEVILLE. PLANIT GEO may retain reproduced copies of drawings and copies of other documents.

6.12.2 Planning documents, computer models, drawings, specifications and other hard copy or electronic media prepared by PLANIT GEO as part of the Services shall become the property of CITY OF

FAYETTEVILLE when PLANIT GEO has been compensated for all Services rendered, provided, however, that PLANIT GEO shall have the unrestricted right to their use. PLANIT GEO shall, however, retain its rights in its standard drawings details, specifications, databases, computer software, and other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of PLANIT GEO.

6.12.3 Any files delivered in electronic medium may not work on systems and software different than those with which they were originally produced. PLANIT GEO makes no warranty as to the compatibility of these files with any other system or software. Because of the potential degradation of electronic medium over time, in the event of a conflict between the sealed original drawings/hard copies and the electronic files, the sealed drawings/hard copies will govern.

6.13 Notices

6.13.1 Any Notice required under this Agreement will be in writing, addressed to the appropriate party at the following addresses:

CITY OF FAYETTEVILLE's address:
113 West Mountain Street
Fayetteville, Arkansas 72701

PLANIT GEO's address:
7878 Wadsworth Blvd., Suite 340
Arvada, CO 80003

6.14 Successor and Assigns

6.14.1 CITY OF FAYETTEVILLE and PLANIT GEO each binds himself and his successors, executors, administrators, and assigns to the other party of this Agreement and to the successors, executors, administrators, and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither CITY OF FAYETTEVILLE nor PLANIT GEO shall assign, sublet, or transfer his interest in the Agreement without the written consent of the other.

6.15 Controlling Law

6.15.1 This Agreement shall be subject to, interpreted and enforced according to the laws of the State of Arkansas without regard to any conflicts of law provisions.

6.16 Entire Agreement

6.16.1 This Agreement represents the entire Agreement between PLANIT GEO and CITY OF FAYETTEVILLE relative to the Scope of Services herein. Since terms contained in purchase orders do not generally apply to professional services, in the event CITY OF FAYETTEVILLE issues to PLANIT GEO a purchase order, no preprinted terms thereon shall become a part of this Agreement. Said purchase order document, whether or not signed by PLANIT GEO, shall be considered as a document for CITY OF FAYETTEVILLE's internal management of its operations.

SECTION 7 - SPECIAL CONDITIONS

7.1 Additional Responsibilities of PLANIT GEO

7.1.1 CITY OF FAYETTEVILLE's review, approval, or acceptance of design drawings, specifications, reports and other services furnished hereunder shall not in any way relieve PLANIT GEO of responsibility for the technical adequacy of the work. Neither CITY OF FAYETTEVILLE's review, approval or acceptance of, nor payment for any of the services shall be construed as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

7.1.2 PLANIT GEO shall be and shall remain liable, in accordance with applicable law, for all damages to CITY OF FAYETTEVILLE caused by PLANIT GEO's negligent performance of any of the services furnished under this Agreement except for errors, omissions or other deficiencies to the extent attributable to CITY OF FAYETTEVILLE or CITY OF FAYETTEVILLE-furnished data.

7.1.3 PLANIT GEO's obligations under this clause are in addition to PLANIT GEO's other express or implied assurances under this Agreement or State law and in no way diminish any other rights that CITY OF FAYETTEVILLE may have against PLANIT GEO for faulty materials, equipment, or work.

7.2 Remedies

7.2.1 Except as may be otherwise provided in this Agreement, all claims, counter-claims, disputes and other matters in question between CITY OF FAYETTEVILLE and PLANIT GEO arising out of or relating to this Agreement or the breach thereof will be decided in a court of competent jurisdiction within Arkansas.

7.3 Audit: Access to Records

7.3.1 PLANIT GEO shall maintain books, records, documents and other evidence directly pertinent to performance on work under this Agreement in accordance with generally accepted accounting principles and practices consistently applied in effect on the date of execution of this Agreement. PLANIT GEO shall also maintain the financial information and data used by PLANIT GEO in the preparation of support of the cost submission required for any negotiated agreement or change order and send to CITY OF FAYETTEVILLE a copy of the cost summary submitted. CITY OF FAYETTEVILLE, the State or any of their authorized representatives shall have access to all such books, records, documents and other evidence for the purpose of inspection, audit and copying during normal business hours. PLANIT GEO will provide proper facilities for such access and inspection.

7.3.2 Records under Paragraph 7.3.1 above, shall be maintained and made available during performance on assisted work under this Agreement and until three years from the date of final payment for the project. In addition, those records which relate to any controversy arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such appeal, litigation, claim or exception.

7.3.3 This right of access clause (with respect to financial records) applies to:

7.3.3.1 Negotiated prime agreements:

7.3.3.2 Negotiated change orders or agreement amendments in excess of $10,000 affecting the price of any formally advertised, competitively awarded, fixed price agreement:

7.3.3.3 Agreements or purchase orders under any agreement other than a formally advertised, competitively awarded, fixed price agreement. However, this right of access does not apply to a prime agreement, lower tier subagreement or purchase order awarded after effective price competition, except:

7.3.3.3.1 With respect to record pertaining directly to subagreement performance, excluding any financial records of PLANIT GEO;

7.3.3.3.2 If there is any indication that fraud, gross abuse or corrupt practices may be involved;

7.3.3.3.3 If the subagreement is terminated for default or for convenience.

7.4 Covenant Against Contingent Fees

7.4.1 PLANIT GEO warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement of understanding for a commission, percentage, brokerage or continent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by PLANIT GEO for the purpose of securing business. For breach or violation of this warranty, CITY OF FAYETTEVILLE shall have the right to annul this Agreement without liability or at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

7.5 Gratuities

7.5.1 If CITY OF FAYETTEVILLE finds after a notice and hearing that PLANIT GEO or any of PLANIT GEO's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts or otherwise) to any official, employee or agent of CITY OF FAYETTEVILLE, in an attempt to secure an agreement or favorable treatment in awarding, amending or making any determinations related to the performance of this Agreement, CITY OF FAYETTEVILLE may, by written notice to PLANIT GEO terminate this Agreement. CITY OF FAYETTEVILLE may also pursue other rights and remedies that the law or this Agreement provides. However, the existence of the facts on which CITY OF FAYETTEVILLE bases such finding shall be in issue and may be reviewed in proceedings under the Remedies clause of this Agreement.

7.5.2 In the event this Agreement is terminated as provided in Paragraph 7.5.1, CITY OF FAYETTEVILLE may pursue the same remedies against PLANIT GEO as it could pursue in the event of a breach of the Agreement by PLANIT GEO As a penalty, in addition to any other damages to which it may be entitled by law, CITY OF FAYETTEVILLE may pursue exemplary damages in an amount (as determined by CITY OF FAYETTEVILLE) which shall be not less than three nor more than ten times the costs PLANIT GEO incurs in providing any such gratuities to any such officer or employee.

7.6 Arkansas Freedom of Information Act

7.6.1 City contracts and documents, including internal documents and documents of subcontractors and sub-consultants, prepared while performing City contractual work are subject to the Arkansas Freedom of Information Act (FOIA). If a Freedom of Information Act request is presented to the CITY OF FAYETTEVILLE, PLANIT GEO will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et seq.). Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance.

IN WITNESS WHEREOF, CITY OF FAYETTEVILLE, ARKANSAS by and through its Mayor, and PLANIT GEO, by its authorized officer have made and executed this Agreement as of the day and year first above written.

CITY OF FAYETTEVILLE, ARKANSAS	PLANIT GEO, INC.
By :_____	By:_____
Lioneld Jordan, Mayor	Ian Hanou, CEO

ATTEST:

By:_____
Kara Paxton, City Clerk

END OF AGREEMENT FOR PROFESSIONAL SERVICES

QUOTE

PLANIT GEO

QUOTE TO
FAYETTEVILLE, AR
FOR

URBAN FORESTRY PLANNING SERVICES

MAY 4, 2022

PLANIT GEO™
mapping a greener future

PLANIT GEO™

mapping a greener future

Geospatial Technology, Planning, Software, and Natural Resources
7878 Wadsworth Blvd, Suite 340 Arvada, CO 80003
info@planitgeo.com | 303.214.5067 | www.planitgeo.com

Contact:
Chris Peiffer, Director of Urban Forestry Consulting Services, PlanIT Geo
(717) 579-9890 | chrispeiffer@planitgeo.com

CONTENTS

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PLANNING FAYETTEVILLE'S URBAN FOREST

OVERVIEW

The trees and vegetation that we live around, including in parks, arboretums, rights-of-way, boulevards, medians, facility grounds, and greenbelts, are collectively known as the urban forest. Like storm drains and sidewalks, the urban forest is an essential part of city infrastructure and provides meaningful, measurable benefits, like urban heat mitigation, energy savings, climate resilience, and much more.

A plan for the urban forest such as an Urban Forest Management Plan ("UFMP" or "Plan") is a framework for ensuring your forestry program is moving in the right direction. A tree canopy assessment and up-to-date tree inventory establish a baseline of the current urban forest conditions. From this foundation the UFMP looks to the future, asking what kind of urban forest you would like to see and envisioning the actions, goals, and policies to get there. Without a plan, urban forestry programs must operate reactively, mitigating risks and emergencies as they arise. With a Plan there are still risks and threats to manage, but as time progresses, less mitigation work has to be done on-demand, which saves time and money, and proactive operations led to greater urban forest benefits.

The City of Fayetteville's Urban Forestry Program within the Parks & Recreation Department— and supported by the Urban Forestry Advisory Board (UFAB), other departments, partners, and contractors— manages the public tree population to be healthy, safe, and diverse while addressing the needs of the community. This can be strengthened through progressive forestry practices and public engagement. A UFMP charts a course for reaching a shared vision for Fayetteville's public trees and can be extended to incorporate the goals of the whole community and provide comprehensive guidance for the entire urban forest.

Fayetteville's Urban Forestry Program is managed by three separate entities within the City: Street tree maintenance is performed by the Transportation Department right-of-way work crews, park and trail tree maintenance is carried out by the Parks and Recreation Department Urban Forestry Services crew, and tree preservation and protection for new development is performed by the Urban Forester. The City of Fayetteville Urban Forestry Department works with other City departments, as well as outside contractors, to plant trees. As representatives of the people of Fayetteville, the City's program focuses on providing an urban forest that is safe, healthy, diverse, and able to provide the greatest benefit to the people, wildlife, and environment of the City.

Our Planning Framework

Creating an actionable Plan requires a clear process and well-coordinated efforts between stakeholders. PlanIT Geo has a proven planning framework for managing these many moving parts and developing a document that ensures management decisions made today build towards beneficial outcomes for decades to come. The Consulting Team will analyze the changing urban forest to develop a forward-thinking strategic plan supported by a shared vision.

As consultants for city, county, and nonprofit urban and community forest plans, our Consulting Team has worked with a wide variety of groups to determine what they have, where they want to be, and how to get there. The first step in preparing a plan involves a conversation to learn about the needs and desires of the Urban Forestry Program, tree resources, and the public. We listen and research to deliver the most effective and useful plan for a community to achieve maximum, long-term benefits. From there, we gather vital data regarding the public tree population through inventories and citywide tree canopy cover using GIS canopy assessments.

Our consultants have experience working with internal and external stakeholders to achieve the goals and expectations of the community. We incorporate recommendations that are mindful of limited natural resources and economic constraints, striving to have these plans become working documents. With any plan, the goals and strategies must be monitored to allow for adaptive management over time as changes occur both in the physical/biological environment and in the expectations of city residents. A robust tree inventory management system is instrumental in enacting the plan efficiently and continually tracking progress.

A Continuous Process

The process doesn't end once the inventory data is collected and the Plan is written. As your long-term partner, PlanIT Geo's consultants commit to reviewing our client's progress and offer recommendations via an implementation audit, typically one and two years out from Plan adoption.

We understand that a robust urban forestry program can only thrive with accurate data, effective planning, and the support and participation from the community. Our proposed approach consists of data collection, external stakeholder exercises, community surveys and meetings, and City staff interviews to guide plan development aligned with a shared vision for the urban forest. In addition to community support, an extensive review of and recommendations for the City's tree operations, policies, standards, and ordinances will provide the backbone for successful implementation of the Plan.

This effort will support ongoing initiatives such as Fayetteville's Tree Preservation and Landscape Manual, the 2012 Urban Tree Canopy Assessment, City Plan 2040, Master Street Plan, Parks & Recreation System Master Plan, Energy Action Plan, neighborhood plans, Speak Up Fayetteville, and other City and partner plans, resources, and programs. We will use our combined expertise, project proven management approaches, and communications protocols for a successful project experience.

PlanIT Geo is genuinely excited to collaborate with the City of Fayetteville and its partners on this important effort to grow a more sustainable and equitable urban forest benefiting current and future generations.

URBAN FORESTRY SERVICES COSTS

URBAN FORESTRY PLANNING OPTION SELECTED

Urban Forest Management Plan: Includes all components of a comprehensive management plan with a greater emphasis on benchmarking research, staff/stakeholder consultations, program auditing, policy changes, canopy goals, strategic planting, programmed pruning, resiliency and sustainability, long-range planning, and a long-term shared vision with supporting goals.

URBAN FOREST MANAGEMENT PLAN TASKS AND COSTS

TASKS (Detailed on Page 5)	Cost
Task A. Project Management	$950
Task B. Research and Information Gathering	$2,050
Task C. City Operations and Workflows	$4,475
Task D. Existing Conditions	$2,900
Task E. Benchmarking Research	$1,775
Task F. Community Engagement	$2,000
Task G. Urban Forest Audit	$2,425
Task H. Strategies and Recommendations	$7,725
Task I. Goal Framework	$1,250
Task J. Plan Development	$8,400
Task K. Final Delivery	$1,350
TOTAL	**$35,300**
TIMELINE	**9-12 months**

*Descriptions for the above tasks are provided on **page 5**. Pricing and estimated timelines are based on the needs identified for Fayetteville's urban forest. Final pricing and timeline to be provided upon approval of desired scope of work. Pricing good for 60 days.*

Additional Considerations (Detailed on Page 7)	Estimated Cost
Tree Species & Climate Analysis	$2,500
Invasive Species Program Review	$2,000
Trees & Construction Operations Solutions Template	$0

*Descriptions for additional considerations above are provided on **page 7**.*

Tree Inventory Services Option Selected

Public and Private Tree Inventory Samples	Unit Rate	Total Price
Public Street Tree Inventory: 5% of linear road miles (25 miles)	$350/mile	$8,750
Public Park Tree Inventory: 10% of 585 park acres (60 acres)	$250/acre	$15,000
Private Tree Sample from ROW of parcels adjacent to road		$10,000
Public and Private Tree Inventory Sample Total		**$33,750**

A description of the public street, public park, and private tree sample inventories is provided on ***page 17****.*

Proposed Total Project Cost

	Cost
Public Street and Park Tree Sample Inventory	$23,750
Private Tree Sample Inventory	$10,000
Option C, Urban Forest Management Plan	$35,300
Tree Species & Climate Analysis	$2,500
Invasive Species Program Review	$2,000
Trees & Construction Operations Solutions Template	$0
Total Project Cost	**$73,550**

MANAGEMENT PLAN TASKS

OPTION C

Task A. Project Management — $950

A remote project kickoff meeting with City project team. Option to record the meeting and share the final presentation as a PDF. To guide the development of the Plan, an Internal Work Plan also referred to as a Plan Narrative will be drafted as a living document that summarizes the project timeline, milestones, tasks, communications, and other decisions.

Task B. Research and Information Gathering — $2,050

Using the USFS Urban Forest Audit's Discovery Matrix, all available and pertinent resources (plans, studies, reports, manuals, etc.) will be reviewed and cross-examined with the Matrix's 11 categories and 130 elements relating to urban forest management. After completing initial research, the Consulting Team will prepare a Request for Information document for the City to fill in any information gaps that will inform the development of the Plan.

Task C. City Operations and Workflows — $4,475

The Consulting Team will provide a suggested list of staff and stakeholders to participate in the survey. The survey (Google Form or Fillable PDF) will capture existing workflows, operations, strengths, challenges, and shared priorities. Optional follow-up interviews (up to 4) to further discuss responses will be available and held remotely. Once the information is gathered, the Consulting Team will summarize and analyze findings to be incorporated into the Plan.

Task D. Existing Conditions — $2,900

Using the inventory and canopy data, the Consulting Team will analyze the City's public tree population (and private trees if applicable) and citywide urban forest to identify the current structure, characteristics, trends, and vulnerabilities that will inform the Plan's strategies.

Task E. Benchmarking Research — $1,775

Using the 2014 Community Forestry Census of 670 U.S. communities (Hauer, et al.) and the most recently available nationwide Tree City USA records (of about 3,500 communities), the Consulting Team will compare the City's benchmarked values to cities of similar size, location, program structure, number of public trees, and other considerations. Attributes collected during the comparison study will include metrics such as trees per capita, canopy cover, canopy goals, budget per tree, number of staff, program budget, trees pruned/planted/removed, policies, ordinances, among others. The Consulting Team will complete the first round of benchmarking after the City approves the comparison cities and the attributes to collect. After City review, the Consulting Team will update the benchmarking. This process enables the development of realistic strategies and targets and offers a means to measure Plan implementation progress.

Task F. Community Engagement — $2,000

Community involvement in the Plan is essential to developing a shared vision and long-term commitment for a sustainable urban forest. Engagement includes an online public survey and remote presentations to City Council and the Urban Forestry Advisory Board. Additional considerations for engagement are provided as a separate menu.

Task G. Urban Forest Audit	$2,425

Using the USFS Urban Forest Audit system and the information gathered from the previous planning tasks, the Consulting Team will review and rank the City's current status for 130 urban forest management elements within 11 categories. This audit or gap analysis quantifies the City's current status as it relates to the urban forest resource, the programs that manage it, and the community that shapes and benefits from it. The audit will identify strengths and opportunities for improvement that will be addressed in the Plan's goals and strategies. The framework of the audit enables the City to monitor Plan implementation and track progress towards more optimal levels of management and sustainability.

Task H. Strategies and Recommendations	$7,725

Based on the primary challenges, priorities, and opportunities identified in the planning process, strategies and recommendations will be developed by the Consulting Team. These strategies may address maintenance and removal priorities, optimal public tree pruning cycles and necessary resources (staffing and funding), planting, community engagement, program structure/efficiencies, canopy goals and planting priorities, ordinance revision, canopy vulnerabilities, replacement trees, resiliency and equity, and funding, among others. Draft strategies and recommendations will be shared with the City for review and input and incorporated into the Plan.

Task I. Goal Framework	$1,250

Using the findings from staff and stakeholder interviews and community engagement a draft and final urban forest vision will be developed along with the goals, strategies, and actions to reach the vision. Actions will be SMART-- Strategic, Measurable, Attainable, Realistic, and Timebound and include targets and a monitoring plan to measure implementation progress. After City review, the final goal framework will be prepared and incorporated into the Plan and will include a separate, interactive worksheet where the City can rank and order actions based on priority, timeframe, level of effort, funding mechanism, and other attributes. An implementation and monitoring plan within the UFMP will offer guidance for evaluation, monitoring, reporting, and revising the Plan.

Task J. Plan Development	$8,400

With all components of the planning and goal framework completed, the Consulting Team will draft the plan based on a final approved outline. The Plan development process will include 2 drafts and 2 rounds of review followed by a remote presentation and preparation of the final Plan with graphic design and local photos.

Task K. Presentation and Delivery	$1,350

At any stage of the project, the Consulting Team can provide a remote presentation to the City's desired audience, board, committee, or Council. This presentation is separate from the Community Engagement and draft Plan presentations. After all project components are completed, the Consulting Team will prepare a final delivery folder containing all project components and supporting files. The Consulting Team will meet remotely with the City to discuss the final deliverables for approval of project completion.

Additional Details

Canopy Goal Setting

Short and long-term canopy goals Citywide and by planning area (i.e., land use) will be developed based on existing policies and plans, City staff input, community feedback, benchmarking research, baseline conditions, opportunities and vulnerabilities, and industry standards and best practices.

Considerations for canopy goal setting include: intermediate canopy goal milestones and planting targets; proportion of commitment from city and partners/public (i.e., 50/50 split on # of trees per year), proportion of large versus small-statured trees at maturity planted; natural mortality and planting mortality rates; existing policies/ordinances and planned growth; estimated number of trees removed via permits; and others.

Tree Inventory Analysis

An analysis of the inventory data collected will inform baseline conditions as well as planting, maintenance, and preservation strategies to grow a sustainable and resilient urban forest. In addition to the standard analyses of inventory populations— such as structure, relative age, condition and maintenance needs— the relative performance index (RPI) and the importance values (IVs) will be calculated for the top ten most common species on public and private land (if applicable). This will determine existing tree species performance Citywide and by growing space and planting site width to inform future planting strategies and the Tree Species & Climate Analysis task described below. As a result, canopy goals can be achieved by planting a diverse and sustainable urban forest that is properly managed and cared for by the City and all members of the community.

Tree Species & Climate Analysis

To grow a sustainable urban forest, a climate forecast analysis will be conducted for the City of Fayetteville using local inputs and tools such as Climate Mapper and Climate Impact Explorer. The analysis will identify sister climate cities— those cities with a current temperature and precipitation rate as forecasted 60-100 years from now in Fayetteville. Based on the findings, tree planting lists within the 3-4 sister climate cities will be evaluated to identify current overlaps between their lists and Fayetteville's and potential tree species to integrate into future planting along with those species of trees to begin phasing out of the urban forest. For an additional $1,000 PlanIT Geo's Consulting Team can interview urban foresters at the 3-4 sister climate cities to gather input on what is working well, what they are trying out, and what is not working in their urban forest to inform Fayetteville's climate tree species.

Invasive Species Program Review

Fayetteville has a robust program for invasive species management. The Consulting Team will review the existing program, align operations with best practices, and develop a recommendations report.

PROPOSED TIMELINE

Urban Forest Management Plan and Supporting Studies 9 months Jun 2022 – Feb 2023

Public Street and Park Tree, Private Tree Sample 2 months Oct 2022 – Nov 2022

Task	Jun22	Jul22	Aug22	Sep22	Oct22	Nov22	Dec22	Jan22	Feb22
Task A. Project Management	■								
Task B. Research and Information Gathering	■	■			■	■			
Task C. City Operations and Workflows		■							
Task D. Existing Conditions		■	■			■			
Task E. Benchmarking Research			■						
Task F. Community Engagement			■		■				■
Task G. Urban Forest Audit				■					
Task H. Strategies and Recommendations				■	■	■			
Task I. Goal Framework						■			
Task J. Plan Development						■	■	■	
Task K. Final Delivery									■

■ **UFMP tasks**

■ **Inventory tasks**

GENERAL CONSULTANT INFORMATION

The consultant for this project is PlanIT Geo, INC, an urban forestry consulting and software firm based in Arvada, CO (7878 Wadsworth Blvd. Suite #340 Arvada, CO | P: 303-214-5067 | E: info@planitgeo.com). In addition to our Colorado office, PlanIT Geo also has offices in strategic locations across the country as well as international partners. To date, PlanIT Geo has 30 full-time employees.

Founded in 2012, PlanIT Geo is a services and software company specializing in urban and community forestry, risk tree management, software development, planning, and GIS. Our staff include ISA Certified Arborists, ISA Municipal Specialists, ISA Tree Risk Assessment Qualified (TRAQ) personnel, urban foresters, GIS professionals, software developers, project managers, and technical support.

PlanIT Geo provides contractual services including tree inventories and risk assessments using TreePlotter™ software, urban forest and risk tree planning, tree inventory and management software, land cover mapping (LiDAR/multispectral imagery), tree canopy assessments, GIS analysis, and i-Tree studies. Over 400 communities, nonprofits, and state/local governments throughout the United States, Canada, and Australia have employed our team to perform tree inventories, write tailored management plans, and conduct tree canopy assessments. The company is organized into four unique departments to provide specialized services: Consulting, GIS, Inventory, and Software.

URBAN FORESTRY CONSULTING

In the past 7 years, PlanIT Geo has managed or continues to manage urban and community forest management / master plan projects with budgets totaling over $1 million, engaging over 6,200 community residents, and interviewing over 200 city staff representing nearly 65 departments. PlanIT Geo has completed urban and community forest management/master plans, maintenance plans, risk tree plans, strategic planting plans, storm response and mitigation plans, and canopy action plans for the public, private, and nonprofit sectors.

GIS AND GEOSPATIAL SERVICES

PlanIT Geo's GIS or Geospatial Services department has completed services for communities varying in size (less than 1 square mile to over 1,000 square miles), ecoregion (forest, tropical, grassland, desert, Mediterranean), and tree species composition. Over 1,000,000 acres of urban tree canopy have been mapped, helping each community to understand their gray versus green infrastructure, locate and understand specific canopy gains and losses by land use type, quantify ecosystem benefits being provided, assess tree equity, and target planting spaces in the most suitable locations.

Currently nine US state agencies and dozens of communities utilize TreePlotter INVENTORY and CANOPY software on a regional or statewide basis for cloud hosting of tree inventories, canopy assessments, document storage, community engagement, and interactive dashboards. And most recently, we are now offering 60 cm resolution land cover data nationwide, off-the-shelf, through the advancements in Artificial Intelligence (AI) and Machine Learning (ML). We have high-resolution data at 97% accuracy for tree canopy, impervious, and plantable areas (grass, open space) for every city in the lower 48 states, as well as change analysis from 2011. This data allows PlanIT Geo to offer significantly more data at lower cost and ultimately more value to your local capacity-building programs.

Tree Inventory and Assessments

Our Certified Arborists have inventoried over 900,000 trees across 29 states using TreePlotter™. Also, the team has completed ISA Level 2 Risk Assessments for thousands of trees and has completed inventory projects in every season and tree growing stages.

Urban Forestry Software

Since 2012, there are over 400 TreePlotter™ clients which collectively contain over 4,000 individual user login accounts. Our GIS, Inventory, and Consulting teams also use TreePlotter daily to perform project tasks for communities, organizations, and consultants.

Summary

With our team, the City's short and long-term goals will be met through skilled, informed, and accurate data production, the benefits of today's best technology and tools, superior coordination, communication, project management, and local experience. Our managerial and staffing capacity will ensure the project tasks for which PlanIT Geo is responsible are completed on time and on budget.

For this project, PlanIT Geo will provide its Director of Geospatial Services (Denver, CO), Director of Field Services (Boca Raton, FL), and Director of Urban Forestry Consulting Services (Harrisburg, PA) to serve as project managers to complete any GIS/Tree Canopy Assessment, Tree Inventory, Urban Forestry Consulting services, respectively.

PLANIT GEO™
mapping a greener future

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www.planitgeo.com

GENERAL APPROACH TO SERVICES

FUNDAMENTAL FRAMEWORK OF PLANIT GEO'S PLANNING PROCESS

WHAT DO WE HAVE?

Existing Conditions
Research
Data Analyses
Consultations
Public Input

WHAT DO WE WANT?

Standards & Best Practices
Staff Consultations
Public Input
Benchmarking Research
Urban Forest Audit

HOW TO GET WHAT WE WANT?

Shared Vision
Recommendations
Goals, Strategies, Actions
Work Plans
Canopy Action Plan
Strategic Urban Forest Plan

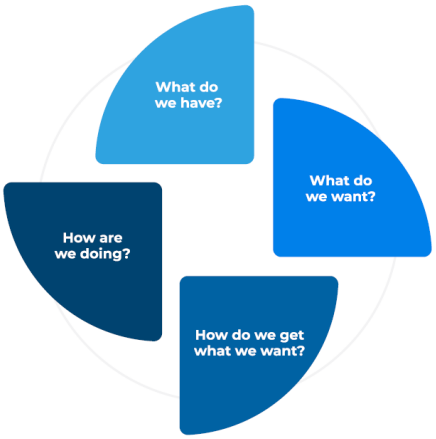
HOW ARE WE DOING?

Urban Forest Audit
Work Plans
Implementation Team
Data Management
Policy Enforcement
Adaptive Management

URBAN FORESTRY CONSULTING – GENERAL APPROACH

Project Management

Kickoff, internal work plans, project management software, monthly meetings



Existing Plans and Policies (Research Deep Dive)

Research and review existing documents and plans to gauge the city's readiness for urban forest management improvements and opportunities to leverage resources.

Stakeholder Consultations & Interviews

Interviews, meetings, and surveys for key staff and stakeholders to gather an understanding of existing workflows, strengths, challenges, and priorities.

Existing Conditions ("Needs Assessment")

Analysis of datasets to inform recommendations for improving baseline conditions.

Urban Forest Benchmarking Research

Utilize information gathered from research, staff consultations, and data analyses to cross-examine baseline conditions to analogous communities and industry standards enabling the development of realistic goals, actions, and targets.

Community Engagement

Guided by a community outreach strategy, engagement sessions at key project intervals inform the development of plans. Sessions may include meetings, meet & greets, surveys, contests, events, and social media, among others.

Urban Forest Audit System

Based on outcomes from all previous planning components, a systematic evaluation of all elements pertaining to urban forest management is completed using the US Forest Service's Urban Forest Audit System. Includes 130 elements that are scored on a 0-3 scale to quantify city strengths and challenges that inform goals and actions.

Recommendations, Goal and Action Framework

Specific recommendations and guidance based on city objectives, feedback, and needs identified in the planning process. Examples include tree canopy cover goals, priority planting areas, ordinance updates, tree preservation guidance, risk tree management, storm preparedness and response, among others. SMART (Strategic, Measurable, Attainable, Realistic, and Time-bound) goals and actions that are prioritized across the desired planning horizon (e.g., 10- or 20-years).

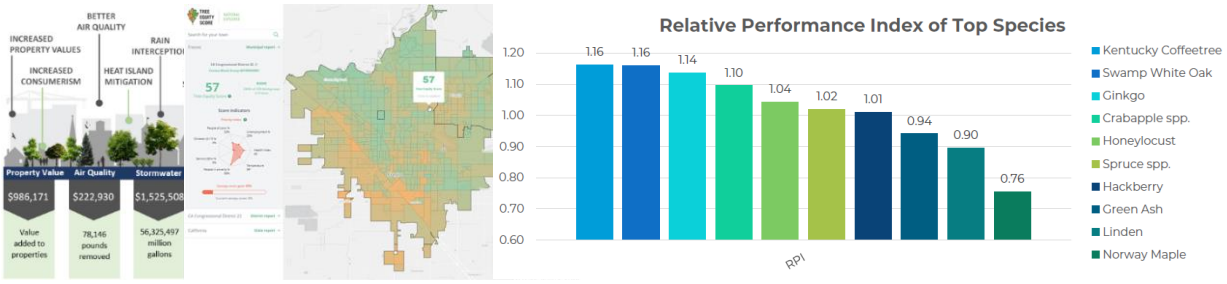
Presentations

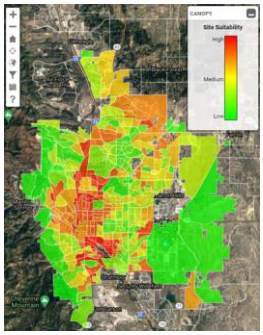
Presentations (in-person or virtual) can be provided on the findings, draft, and final plan to the desired audience(s) such as Tree Boards, Planning Commissions, City Council.

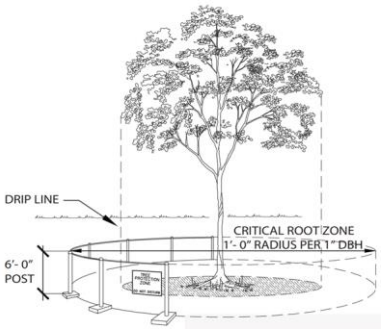
Plan Writing and Delivery

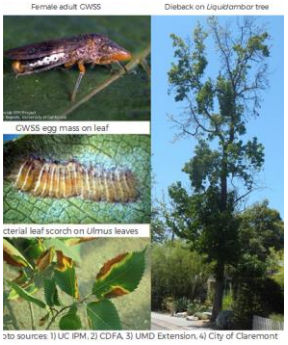
Drafts prepared in Word and shared as PDFs for staff and stakeholders to provide feedback. Typically, two (2) drafts are prepared and include remote meetings to discuss revisions. Upon review and revision, the final plan or reports are prepared. Upon completion of all required tasks, virtual training on the delivery items is provided.

Example Graphics for Urban Forestry Consulting









Additional Consulting Services

Task	Description
Trees and Construction (Sidewalk) Operations Plan	Addresses tree removals due to sidewalk issues. The solutions workbook provides a decision checklist/matrix for the tree, the site, the hardscape and details alternative solutions that are design-, tree-, root-, or material-based along with the estimated costs, life expectancy, efficacy, and level of effort.
Master Tree List	Use of existing and regional tree lists to identify a tree species palette specific to the City to grow a sustainable and resilient urban forest. Considers species performance and species resilient to the changing climate. Also introduces "Sister Climate City" tree species i.e., those trees acclimated to climates similar to the City's climate in 60 years. Includes attributes such as mature tree height/width, key feature, minimum planting width, native/nonnative, mature form, deciduous/coniferous/evergreen, and up to 5 other attributes identified by the City. Delivered as an interactive/sortable worksheet and PDF document. Includes a draft, review session, and final document.
Community Engagement Plan	Provides guidance for the City, partners, and stakeholders to engage the public in implementing the Strategic Urban Forest Plan. Includes a draft, review session, and final document.
Tree Preservation Guidance	Evaluates the tree inventory data to provide tiers of trees for preservation based on a combination of criteria including tree size, species, location, condition, ecosystem services, and other characteristics. Includes a draft, review session, and final document.
Tree Pest and Disease Management Plan	Identifies existing and potential exotic tree pests and diseases of concern facing the City's urban forest. Utilizes the inventory to assess susceptibility and risk and provides guidance for monitoring, managing, treating, and recovering. Includes a draft, review session, and final document.
Storm Preparedness and Response Plan	Provides the protocols, procedures, and mechanisms to plan, prepare, respond, and recover from storms and natural disasters as it relates to the urban forest. Utilizes tree inventory, canopy data, research, and industry standards. Includes a draft, review session, and final document.

General Approach to Desired Additional Consulting Services

Master Tree List: *No recommended tree list, only the climate considerations*

1. Existing List Review
2. Climate Forecast Analysis
3. Confirmation of Sister Climate Cities
4. Sister Climate City Tree Lists Review
5. Identify Existing and New Trees for List
6. Draft Review
7. Final List for Climate Considerations

Tree Pest & Disease Management: *A review of the City's Invasive Species Program*

1. Review Existing Invasive Species Program
2. Align Operations with Best Practices
3. Recommendation Summary Report

GIS – General Approach

Fayetteville recently had a tree canopy assessment completed. This section provides an overview of the process along with additional considerations.

An assessment of tree canopy cover citywide provides the data and information to develop goals and strategies relating to tree planting, preservation, tree equity, and risk management along with the data to support community outreach and education. These urban tree canopy assessments, referred to as "UTC Assessments" or "Tree Canopy Assessments" provide the information for long-term planning and serves as a measurement of change and progress over time. This information can be utilized with other city planning efforts for sustainability, equity, human health, climate resiliency, stormwater management, water quality, wildlife preservation and enhancement, air quality improvements, and development guidelines among many others.

UTC assessments provide a baseline understanding of existing canopy cover across the entire city. In addition, these assessments can provide an analysis of possible planting areas citywide and by various planning boundaries.

Urban Tree Canopy (UTC) Assessments for cities represent an important step in understanding current conditions of the urban forest, its tree canopy distribution and value, and the importance of urban forestry during planning processes. Our assessments encompass all public and private lands throughout a city. Our process involves the use of high-resolution orthoimagery, machine learning technologies, and Geographic Information Systems (GIS). The products and outcomes support developing and monitoring of urban tree canopy cover goals, provide key information on plantable spaces, and inform elements of the urban forest management plan. The following outlines the management and technical approaches of each option to successfully complete an updated canopy assessment project.

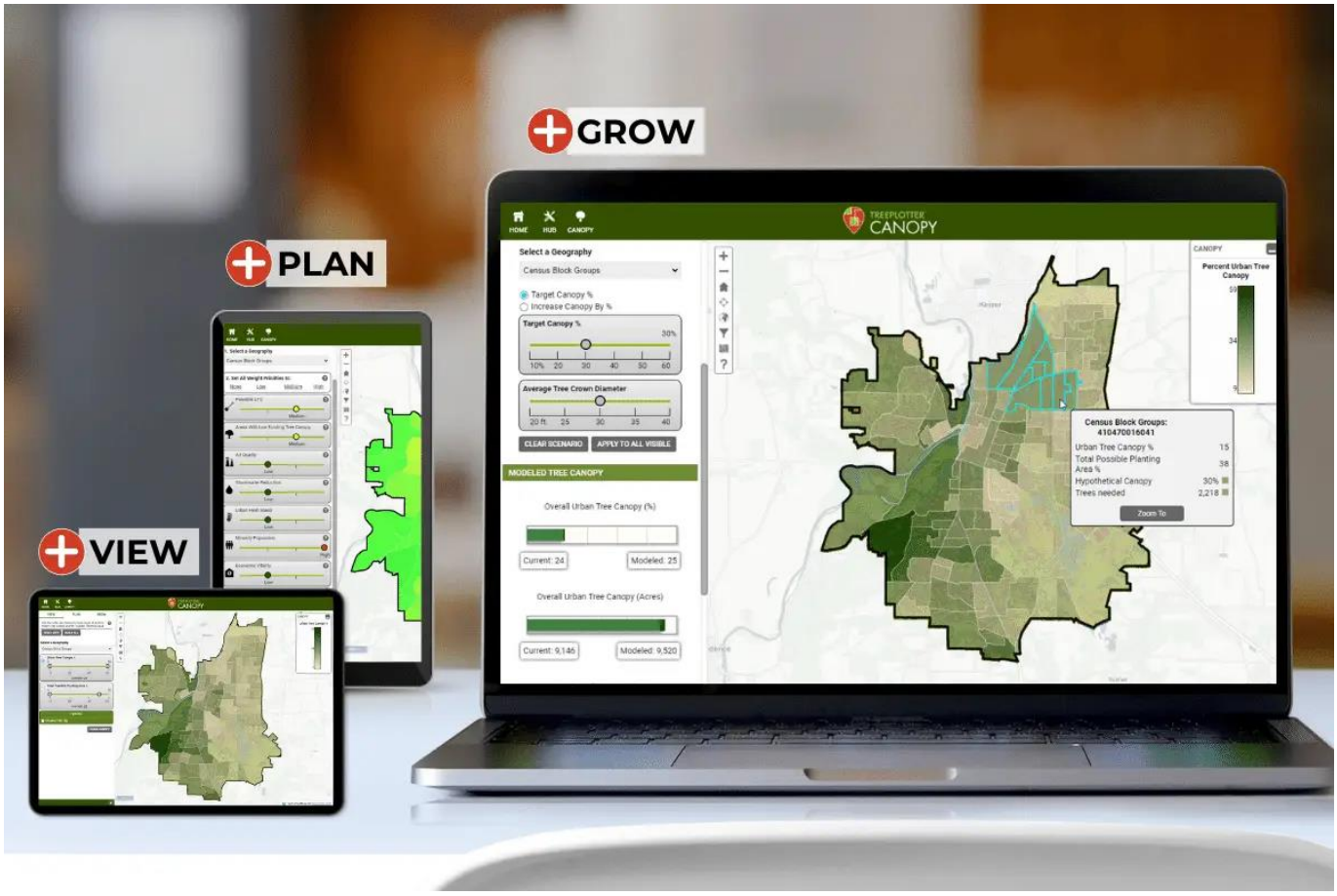
- Project Management, Initiation, and Communications
- Data Collection
- High-Resolution Land Cover and Urban Tree Canopy Assessment
- Land Cover Mapping
- Planting Opportunities
- Urban Tree Canopy Metrics & Maps
- Data Deliverables
- TreePlotter and Decision Support – TreePlotter CANOPY

TreePlotter CANOPY and EarthDefine Data

With TreePlotter CANOPY, Fayetteville will receive high resolution, accurate, and frequently updated tree canopy assessment data and interactive online maps. PlanIT Geo partnered with EarthDefine who uses Artificial Intelligence (AI) and Machine Learning to transform earth sensor data into consumable geospatial information products. A reliable low-cost subscription model provides the data Bexley needs to monitor the urban forest. EarthDefine creates the most detailed and up-to-date tree canopy data for the US. With 60-cm resolution, the data for Bexley accurately captures individual trees and small gaps in the urban forest. The data is reassessed annually to capture tree cover change.

AI-driven tree canopy data is created by taking aerial imagery and LiDAR data with machine learning algorithms to extract different ground cover classes and is updated as soon as new imagery is available, usually every two years for most parts of the United States, to capture changes due to deforestation, urbanization, land-use changes, and natural disasters.

AI-driven tree canopy data provides you with rapid, high-resolution, accurate tree canopy data updating on a higher frequency and at a lower cost than traditional urban tree canopy assessments. Since the data is created using AI, it can be delivered almost immediately (depending on the data desired). Traditional urban tree canopy assessments can take up to a year to complete while AI-driven tree canopy data can be delivered within a week, or less. The data is created using aerial imagery and LiDAR data that is updated on a regular schedule and can be purchased through an annual subscription, providing you with the most up-to-date tree canopy information. Using the imagery and AI technology, the data can be offered at a lower cost, helping to flatline city budgets, having low annual costs instead of a large spike every 5-10 years for a comprehensive study.



INVENTORY – GENERAL APPROACH

Tree Inventory Options for Fayetteville

At this time, a comprehensive citywide inventory of public and private trees is not feasible due to cost limitations. Therefore, PlanIT Geo proposes options to conduct sample inventories of public streets, public parks, and private properties abutting public roadways.

The sample of public streets is based on 567 total linear road miles and the rule of 5%. This amounts to an inventory of trees in public rights-of-way along 25 road miles.

The public park tree inventory sample is based on 585 total non-forested acres of parks (3,915 total park acres). 10% of the entire non-forested parks acres are to be inventoried resulting in a total of 60 acres of parks.

For the private tree sample inventory, the inventory crew will inventory trees along the same routes as the public street tree inventory sample and collect data from the public right-of-way (i.e., sidewalk) for private properties adjacent to the roadway. Limited data fields will be collected for this sample.

The inventory team will meet with the City to discuss the public and private priority areas, protocols, procedures, methods, and final fields/values to inventory. The Consulting Team will extrapolate this data to summarize citywide urban forestry metrics.

Web-Based GIS Data Collection

Our web-based capabilities allow us to utilize the mobile GPS location feature built into our hardware devices (iPads/ Samsung tablets). This location feature serves as the first tier for determining the exact location of the tree to be inventoried. Spatial information (latitude and longitude coordinates) is then collected based on the location of the tree point placed on the base maps (Google, Bing, Esri, OpenStreetMap, others) by the arborist. With this, our Tree Inventory Specialists can accurately determine the ownership and exact location of each tree.

Using this approach, cities and PlanIT Geo's staff gain these advantages:

1. **Data and production transparency.** By utilizing a web-based data collection protocol PG will share the real time data collection map service so that collection progress can be monitored by appropriate staff members. Furthermore, web-based data collection enables PG to ensure that no trees are missed or that trees are not double inventoried throughout the entirety of the project.
2. **Increased production rates.** Location data entry using GIS with accurate base map

information is nearly twice as fast as using GPS equipment alone. Inventory personnel are not limited by weather conditions or interference by buildings or other obstructions.

3. **High level of location accuracy.** GIS is only limited by the accuracy of the base map information provided. By utilizing the built-in GPS functionality of our hardware and our field expertise we can ensure accurate location information of 1-meter or less.
4. **Understand and Update.** With simple training, an unlimited number of simultaneous users (i.e. City managers and staff) can track and analyze existing trees according to risk, required action, species, diameter, or any other inventory attribute and quickly and dynamically perform status updates as required over time.

A Note on Data Security - As inventory information is collected, data are instantaneously stored on secure/remote servers eliminating the possibility of data loss and making it possible for City staff to access and download at any time.

Collection Method

PlanIT Geo equips our Tree Inventory Specialists with a customized version of TreePlotter Software for recording the location and attributes of each tree. The GIS-based tree inventory is performed using computer tablets (iPad and Samsung tablets) that read information directly from the World Wide Web on PlanIT Geo's TreePlotter software. This means that any similar web-connected device can also be used to collect, edit, and manage the inventory resources. The application enables each tree to be precisely mapped (within 1-meter spatial accuracy) with the attributes described in the next section.

Tree Inventory Data Fields

PlanIT Geo's final price will be based on the following protocols and fields to be populated for each tree. Final fields will be determined on a project kick-off meeting and will be set for the duration of the project. At minimum, our Tree Inventory Specialists typically collect the following data for each tree mapped:

- Tree species - genus/species AND common names needed
- Measurement of tree DBH (diameter at breast height) in inches
- Street address location
- GPS coordinates
- Location and size of empty and/or potential tree planting sites/stumps appropriate to applicant's current planting and removal patterns
- Crown condition and/or percentage of crown dieback (excellent to dead rating)
- Maintenance recommendation (prune, train, remove, etc.)

If this City would prefer PlanIT Geo can add a list of common observations that we routinely see in the field. The addition of these observations would not increase our per tree rate.

Quality Control

PlanIT Geo provides cities with professional, courteous, and informative tree inventory project experiences beginning with high-quality tree inventory data. We can make this assurance because:

1. Quality control begins with proper training and education. PlanIT Geo's ISA Certified Arborists are college-educated and skilled at conducting tree inventories.
   **All technicians working on this project have an ISA Certified Arborist credential and are supervised by an Arborist with a Tree Risk Assessment Qualification (TRAQ) credential.*

2. During the inventory process, extensive quality control checks are applied regularly. Using PlanIT Geo's proprietary TreePlotter™ application access will be granted to city staff to dynamically monitor inventory progress.
3. In addition to daily quality checks and control, tree inventory Project Manager performs remote and/or on-site data checks to ensure data collected by other staff adhere to city work specifications and national industry standards.
4. PG welcomes and encourages city staff to perform on-site verification of the data. PG staff will cooperate fully with city staff to achieve a high level of confidence in the accuracy of the data. PG will provide staff with weekly or bi-weekly updates.
5. PG assures that if any errant tree site location is detected, it is our responsibility to correct the data promptly.

Format Options for Inventory Data Deliverables

Upon completion of the inventory and the QA/QC process, PlanIT Geo delivers tree inventory data in Microsoft Excel and ESRI Shapefile and/or File Geodatabase. PlanIT Geo will meet with the city prior to data delivery to review preliminary inventory. Data can be delivered in the desired coordinate system and contain full metadata references. Data will be reviewed for errors prior to being provided to the City. TreePlotter's "Exporter" tool can save data as CSV or Shapefile formats at any point in time during the project and active TreePlotter subscription. Data export is free at any time and will be no extra cost to the city.

Species Identification Proficiency

PlanIT Geo has completed 90+ inventories across the country. Our arborists have nationwide experience and a keen understanding of the tree species capable of growing across the US. Our team can identify any tree species within the US and they routinely train staff on identification and tree inventory methods.

Data Management Experience

Sound data management starts with proper data collection protocols and review. Each inventory project is systematically planned to create an efficient and accurate data collection experience, limiting, or fully preventing data entry errors or omissions. Data collected is reviewed after every day of collection and corrections are made either on a desktop or by revisiting the tree(s) in the field within the same week. Often, tree inventories are collected by more than one Tree Inventory Specialist and effective/accurate collection is maintained through the supervision of the Director of Field Services/Project Manager.

Additionally, TreePlotter™ is built to limit human error with its intuitive design and functionality such as the drop-down menus (rather than typing responses and making typos). PlanIT Geo's servers are capable of hosting large amounts of data, having many state and county TreePlotter™ clients, some with over 500,000 trees. The data is secure, and PlanIT Geo has an offsite backup location with data backup automatically performed every 24 hours.

SOFTWARE – GENERAL APPROACH

The TreePlotter software platform is web/mobile-based, accessible on all major web browsers, responsive to smartphones, can be used on most leading brands of tablets, and is highly configurable. Data is securely stored in Amazon Web Services (AWS) on a US server with access only by our development and support team. Both products, TreePlotter INVENTORY and CANOPY, are offered as supporting tools for public tree and citywide urban tree canopy data management. The platform includes numerous administrative, mapping, visualization, data management, data sharing, filter/searching, and reporting functionality. Related additional technology information:

- Terms of Service and Privacy Policy
- Platform, Security, and Privacy FAQ
- https://support.treeplotter.com/

The TreePlotter platform will allow you to:

- Upload, edit, manage, search/filter, share, analyze and report on tree inventory data and PDFs.
- Configure administrative levels (aka, roles) and permissions, e.g. to restrict data viewed by administrators vs. user vs. public levels, as well as between projects.
- Interact with tree canopy assessment data if TreePlotter CANOPY is purchased:
    - View land cover raster data
    - Select/filter areas within a city based on land cover percentages by assessment boundaries (aka, geographies) such as census blocks, neighborhoods, land use types,
    - Prioritize areas based on tree equity scores from American Forests and other criteria from the American Community Survey census data
    - Create canopy grow-out scenarios including eco benefit data from i-Tree.
- Attach the following data formats to individual trees or at the “community level” (all map-based records, see screenshots below):
    - PDFs (eg management plans, grant applications, budgets, etc.)
    - URLs or hyperlinks, including QR codes
    - Microsoft Word, Access, Excel, and PowerPoint files (CSV as well). Files can then be opened/saved for later use.
- Manage login user accounts
- Create, save, and interactively share maps
- Export a copy of various data to CSV, shapefile, and CAD DXF (city/client owns all data in the application)

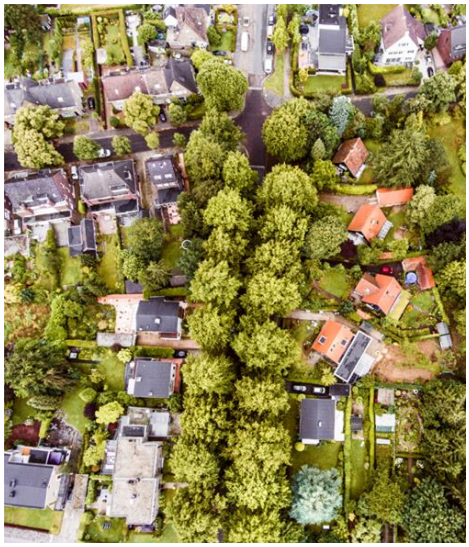
PROJECT TEAMS

PlanIT Geo is staffed with Certified Arborists, Tree Risk Assessment Qualified, Municipal Specialists, college-educated, and experienced personnel to conduct tree canopy assessments, tree inventories, and Urban Forest Management Plans. We will staff this project according to the City's preferred schedule and final scope of work. In any scenario, our Director of Geospatial Services— Jeremy Cantor— would lead the GIS tasks, the Director of Field Services— TJ Wood— would be the project manager for any inventory work, and the Director of Urban Forestry Consulting Services— Chris Peiffer— will lead the development of urban forest management plans, strategies, studies, analyses, and reports.

FAYETTEVILLE, AR		
INVENTORY REPORT, PUBLIC TREE PLAN, URBAN FOREST MANAGEMENT PLAN	**TREE CANOPY ASSESSMENT, TREEPLOTTER CANOPY, GIS STUDIES**	**PUBLIC OR PRIVATE TREE AND/OR PLANTING SITE INVENTORY**
Chris Peiffer, Director of Urban Forestry Consulting	**Jeremy Cantor**, Director of Geospatial Services	**TJ Wood**, Director of Field Services
Rachel Ormseth, Urban Forestry Solutions Consultant	**Ben Wittman**, Geospatial Data Manager	**David McCauley**, Tree Inventory Crew Leader
		Nate Cummings, Tree Inventory Specialist
Alex Hancock, Urban Forestry Climate Consultant	**Morgan Garner**, GIS & Natural Resources Specialist	**Rocky Yosek**, Urban Forestry Consultant

As shown in the table above, the urban forest management planning (Urban Forest Management Plan), tree canopy assessments/GIS, and tree inventories would be managed by PlanIT Geo's Directors. These teams meet weekly to cross-examine total project tasks, provide updates on tasks, milestones and timelines, and transfer information adequately to support tasks.

The organizational chart above also shows the intra-departmental cooperation having staff supporting multiple departments. For example, the Urban Forestry Climate Consultant (Alex Hancock) integrates GIS into planning and canopy assessments and the Urban Forestry Consultant (Rocky Yosek) will provide information and data regarding tree inventories.



URBAN FORESTRY CONSULTING TEAM

Chris Peiffer

ISA Certified Arborist & Municipal Specialist #PD-2070AM

Director of Urban Forestry Consulting

Chris is an ISA Certified Arborist of 11 years and Municipal Specialist for 3 years. He will be the project manager for the Canopy Action Plan or the Strategic Urban Forest Plan.

Chris specializes in urban forest planning, management, development, and innovation. He is experienced in the collection of tree inventory data, inventory data synthesis and analysis, risk tree management, and urban forest management plan writing. This experience includes urban forest management / master plans, tree risk management plans, regional canopy action plans and strategies, strategic planting plans, analysis and reporting of tree inventories, and Urban Tree Canopy (UTC) reports. In the past 7 years Chris has managed over 30 urban forest planning projects with budgets totaling over $1 million and has engaged over 6,200 community residents and over 200 city staff representing nearly 65 departments.

Chris is also an expert arborist and seasoned field crew manager with experience from leading tree care firms, understanding the maintenance needs, tree physiology, risk prioritization, and tree responses to proper tree care. He has a bachelor's degree in Urban Forestry and is a graduate of the 2011 Municipal Forestry Institute, 2013 Urban Forestry Institute, and 2014 Urban Forest Strike Team Training.

Experience

- Kettering, OH Urban Forest Management Plan (PlanIT Geo)
- Troy, NY Urban Forest Management Plan (PlanIT Geo)
- Wilsonville, OR Urban Forest Management Plan (PlanIT Geo)
- Metro Washington, DC Tree Canopy Management Strategy (PlanIT Geo)
- Colorado Springs, CO Urban Forest Management Plan (PlanIT Geo)
- Tacoma, WA Urban Forest Management Plan (PlanIT Geo)
- Alexandria, LA Urban Forest Management Plan (PlanIT Geo)
- Rochester, MN Urban Forest Master Plan (PlanIT Geo)
- Hutchinson, KS Urban Forest Master Plan (PlanIT Geo)
- Fremont, CA Urban Forest Management Plan (PlanIT Geo)
- Claremont, CA Urban Forest Management Plan (PlanIT Geo)

Project Roles (Proposed)

A. Project Management: Kickoff, monthly project meetings, Internal Work Plan
B. Research and Stakeholder Consultations: Development of framework, facilitate meetings
C. Data Analysis: Interpret findings from the inventory and canopy assessment
D. Community Engagement: Outreach Strategy, project website, survey, public forums
E. Urban Forest Audit (Gap Analysis): Conduct audit, participate in project team input
F. Strategic Recommendations: Canopy goals, planting priorities, planting strategies, others
G. Urban Forest Vision and Goal Development: Synthesize information gathered to draft vision
H. Monitoring Plan: Provide insights on processes and protocols
I. Plan Drafts, Reviews, and Final Delivery: Review all deliverables for internal approval

Alex Hancock

ISA Certified Arborist #FL-8295A

Urban Forestry Climate Consultant

Alex is an ISA Certified Arborist with a background in urban planning, urban forestry, and sustainability. She is experienced in tree canopy cover analysis, climate action planning, zoning and land use planning, and public policy.

Alex has a Bachelor's of Urban Planning and earned her Master's in Forest Resources and Conservation with a Graduate Certificate in Geospatial Analysis while working full-time as a City Planner. Her most recent role as Sustainability Coordinator and Certified Arborist for the City of St. Petersburg, FL focused on programs for climate resilience, clean energy, waste reduction, environmental justice, and urban forestry. Her team developed, published, and is implementing the Integrated Sustainability Action Plan, which emphasizes equity as a primary focus of planning for a sustainable and resilient future.

At PlanIT Geo, Alex applies these experiences and skill sets to support the development of urban forest management plans for communities. Specifically, she is directing the integration of urban forestry into sustainability planning for communities through public engagement, staff consultations, policy analysis, and plan development.

Experience

- Lakewood, WA Tree Canopy Goal Setting and Tree Ordinance Revision (PlanIT Geo)
- Saratoga Springs, NY Urban Forestry Management Plan (PlanIT Geo)
- Castleton-on-Hudson, NY Community Forest Management Plan (PlanIT Geo)
- Renton, WA Urban Forest Management Plan (PlanIT Geo)
- Los Banos, CA Urban Forest Management Plan (PlanIT Geo)
- Fremont, CA Urban Forest Management Plan (PlanIT Geo)

Project Roles (Proposed)

A. Project Management: Attend meetings, draft work plan, project management tracking
B. Research and Stakeholder Consultations: Facilitate meetings/surveys, input analysis
C. Data Analysis: Analyze and summarize the tree inventory and canopy assessment data
D. Community Engagement: Provide data to support community engagement
E. Urban Forest Audit (Gap Analysis): Conduct audit, participate in project team input
F. Strategic Recommendations: Canopy goals, planting priorities, planting strategies, others
G. Urban Forest Vision and Goal Development: Draft the goal and action framework, finalize
H. Monitoring Plan: Draft the monitoring plan, schedules, priorities, work plans, and budgets
I. Plan Drafts, Reviews, and Final Delivery: Plan writing, final delivery folder and training

Rachel Ormseth

ISA Certified Arborist #MW-5815A

Urban Forestry Solutions Consultant

Rachel specializes in urban and community forestry planning, management, development, and innovation. Rachel has extensive experience in working with communities, big and small, to manage their city trees in a sustainable and effective manner. Rachel has administered Urban Forestry programs from a state level and has led a team of three urban foresters for work on the ground. Rachel is experienced in the collection of tree inventory data, tree selection, multi-organization project management, and coordination of partnerships for resource sharing.

With five years of public service, Rachel has come to understand and effectively navigate the facets of Urban Forestry in cities where funding and resources are sparse. Rachel knows that successful collaboration can only be achieved when a personal relationship is formed with the client and the client's individual situation is assessed. Through this relationship, the client can receive the proper guidance and tools for a successful project.

Experience

- Kirkwood, MO Urban Forest Master Plan (PlanIT Geo)
- North Tonawanda, NY Community Forest Management Plan (PlanIT Geo)
- Schenectady, NY Community Forest Management Plan (PlanIT Geo)
- Renton, WA Urban Forest Management Plan (PlanIT Geo)
- Los Banos, CA Urban Forest Management Plan (PlanIT Geo)
- Fremont, CA Urban Forest Management Plan (PlanIT Geo)

Project Roles (Proposed)

A. Project Management: Attend meetings, project management tracking
B. Research and Stakeholder Consultations: Review community engagement opportunities
C. Data Analysis: Analyze community feedback gathered from surveys and meetings
D. Community Engagement: Develop Outreach Strategy, website, and engagement tasks
E. Urban Forest Audit (Gap Analysis): Provide insights on community framework
F. Strategic Recommendations: Support strategies development using public input gathered
G. Urban Forest Vision and Goal Development: Support vision development using public input
H. Monitoring Plan: Provide community engagement context to monitoring and reporting
I. Plan Drafts, Reviews, and Final Delivery: Graphic design, Plan writing

TREE CANOPY ASSESSMENT PROJECT TEAM

Jeremy Cantor

Director of Geospatial Services and Project Manager

Jeremy has 15 years of experience in geospatial analysis, data processing, object-based image analysis (OBIA), Python scripting, LiDAR manipulation, and cartography. He has served as the lead geospatial analyst and overall project manager of over 60 urban tree canopy assessments during his 5 years at PlanIT Geo. Jeremy previously worked for the U.S. National Park Service for 7 years. For this project, he will be the primary remote sensing analyst and manager of all GIS tasks, reporting, and final delivery. He will also serve as the primary point of contact for communications with City staff.

Jeremy leads the geospatial team on urban tree canopy assessments, green infrastructure analyses, and other GIS and remote sensing projects. He has managed 60 urban tree canopy (UTC) assessments and contributes to GIS modeling, remote sensing analysis of multispectral and LiDAR imagery, data production, IT, cartography, and web/mobile mapping app design. Jeremy also has seven years of federal government experience working with ocean and coastal resources in the National Park Service focusing on coastal systems, resource assessments, and web mapping design.

Education

Master of Natural Resources Stewardship in Spatial Information Systems | Colorado State University, 2010

Bachelor of Arts in Geography; Economics Minor | University of Vermont, 2006

Experience: Urban Tree Canopy Assessments

Jeremy has led and managed accurate and comprehensive analyses to assess the current status of tree canopy and available planting space. Tasks managed included remote sensing classification, canopy analysis, GIS mapping, tree planting prioritization, summary reports, and web map design. Communication, training, and presentations of project deliverables were provided throughout the project and upon completion. Project examples include: Charlotte and Davidson, North Carolina; Washington, D.C.; Dallas-Fort Worth, TX; West Palm Beach, FL; Charlotte, NC; Colorado Springs, CO; King County, WA (12 cities); Tacoma, WA; Salem, OR; Wichita, KS; Snake River Valley, ID (15 cities); Jacksonville, FL; Fremont, CA, Florida Panhandle (32), and Southwest Georgia (23).

Ben Wittman

Geospatial Data Manager

Ben has over 5 years of experience in GIS and data processing. He has a background in GIS, Geography, and Environmental Studies. At PlanIT Geo, Ben applies natural resource and forestry concepts to manage environmental and geographic (GIS) data sets. He produces geographically modeled data using geoprocessing tools and leads the quality assurance/quality control (QA/QC) process to review, organize, and process aerial imagery and remotely sensed land cover data. He will lead the production of maps and planting areas and assist in data preparation, organization, and visualization.

Ben has a background in the fields of GIS/GPS analysis, GPS data collection, forestry, geomorphology, remote sensing and cartography. He has experience managing large and complex geospatial datasets, creating GIS data, performing land cover classification quality control, writing technical reports, and using and managing SQL databases. Ben joined PlanIT Geo as a GIS Technician in 2016 and has taken a larger role in managing geospatial projects and associated tasks.

Education

Bachelor of Arts in Geography & Environmental Studies; GIS Certificate | University of Colorado at Colorado Springs, 2014

Tree Inventory Project Team

TJ Wood

ISA Certified Arborist #RM- 7676A | Tree Risk Assessment Qualification (TRAQ)

Director of Field Services that will facilitate the kickoff meeting, project deliverables, and daily communications between field staff and City employees.

TJ oversees the field crew on day-to-day data collection. He will lead any tree inventory discussions and be the main point of contact with City staff during data collection. He will work with the City to establish protocols, communications, priority inventory areas, and final delivery of inventory data. He will also be available to provide in-person training on our tree inventory data collection/management software, TreePlotter. He has been an ISA Certified Arborist for 6+ years and will provide tree inventory data collection and assure that other staff members are adequately collecting data. He has 10+ years of collective tree inventory management experience.

TJ graduated with a Bachelor of Science in Landscape Architecture from Colorado State University. At PlanIT Geo, he manages all tree inventory and risk assessment projects, conducts site and tree-specific evaluations, designs planting plans, compiles summary reports, and prepares project deliverables. TJ has experience conducting tree inventories across the nation (100+ projects in 29 states) and provides invaluable tree identification and risk assessment skills. He has collected data on 120,000 trees at PlanIT Geo.

David McCauley

ISA Certified Arborist #IL-9733A | Tree Risk Assessment Qualification (TRAQ)

Tree Inventory Crew Leader that would be stationed locally to the project during the data collection phase of this project. David will be a tree inventory data collector for this project and will report all questions and project updates to TJ Wood, who will be directly in contact with City staff. He will be available to provide in-person training on our tree inventory data collection/management software, TreePlotter.

David has a Bachelor of Science in Forestry specializing in Urban Forest Management from Southern Illinois University of Carbondale and a master's certificate in environmental law and public policy from Loyola University Chicago. To reinforce his knowledge from his degree he also has a widespread background with disease in urban forests with his work history as a Plant Health Care Technician. David has treated hundreds of Ash trees for emerald ash borer, as well as many other species for a variety of diseases. At PlanIT Geo, David has collected data on nearly 60,000 trees and 20 projects across the country.

Rocky Yosek

ISA Certified Arborist #WE-11457A | TRAQ | Municipal Specialist

Tree Inventory Specialist and Urban Forestry Consultant that will be stationed in Kirkwood, MO during the data collection phase of this project.

Rocky will be a tree inventory data collector for this project and will report all questions and project updates to TJ Wood, who will be directly in contact with City staff. He will be available to provide in-person training on our tree inventory data collection/management software, TreePlotter.

Rocky has an extensive urban forestry background he gained while directing the operations of a nonprofit tree program in Tucson, AZ for almost a decade. During his time working there he led large scale tree plantings, taught tree education workshops, led mapping and assessment projects, and managed the operations of two energy efficiency tree distribution programs that delivered approximately 50,000 trees to area utility customers. At PlanIT Geo, Rocky has collected data on nearly 50,000 trees and 20 projects across the country.

Nate Cummings

ISA Certified Arborist #NY-6214A

Tree Inventory Specialist that would be stationed locally to the project. Nate will collect the majority of the tree inventory data for this project and will report all questions and project updates to TJ Wood, who will be directly in contact with City staff. He will be available to provide in-person training on our tree inventory data collection/management software, TreePlotter.

Nate has a Bachelor of Science in Natural Resource Management from SUNY College of Environmental Science and Forestry. At PlanIT Geo, Nate has collected data on our largest project to date, Prince George's County, Maryland, and has collected nearly 20,000 trees.

EXAMPLE PROJECTS AND REFERENCES

URBAN FOREST PLANNING PROJECTS AND REFERENCES

A) City of Kettering, OH Urban Forest Management Plan

Project Manager(s): Chris Peiffer (PlanIT Geo)
Contact Name: Gary Schussler, Parks Superintendent
Contact Info: gary.schussler@ketteringoh.org | (937) 296-2486
Date: February 2020 – April 2020 (2 months) | **Budget:** $7,500
Scope of Services Provided: Extensive information gathering and research was conducted to guide the development of the UFMP. This Plan includes an analysis and summary of the newly collected tree inventory data, program recommendations, and a tree management approach that provides recommendations, schedules, and budgets for tree management activities such as priority removals, routine pruning, young tree training, and planting. The Plan provides a vision for the long-term urban forest and the strategies to achieve this. View the plan here.
Status: Completed

B) Colorado Springs, CO Urban Forest Management Plan

Project Manager(s): Chris Peiffer (PlanIT Geo)
Contact Name: Dennis Will, City Forester
Contact Info: dennis.will@coloradosprings.gov | (719) 385-6550
Date: August 2019 – October 2020 (14 months) | **Budget:** $70,500
Scope of Services Provided: This Plan provided the framework for enhancing the City Forestry Division's levels of service as it relates to the management of the urban forest and meeting community goals. The planning process includes an extensive analysis of the existing conditions and operations. The Audit is informed by information gathering via city staff interviews, public meetings, data analyses, and benchmarking research. The results of the planning included guidance for and impacts of multiple management scenarios and recommended management approach to achieve long-term goals for sustainability. Project includes extensive review of Code and policies. Includes analysis of costs of not pruning, estimated costs for a 7-year rotational pruning program, staffing and budget requirements, emerald ash borer plan, trees and sidewalks operations plan, and fact sheets. View the plan here and the Research Summary supporting the primary framework.
Status: Completed

C) Tacoma, WA Urban Forest Management Plan

Project Manager(s): Chris Peiffer (PlanIT Geo)
Contact Name: Michael Carey, Urban Forest Program Manager
Contact Info: mcarey@cityoftacoma.org | (253) 404-6989
Date: April 2019 – December 2019 (8 months) | **Budget:** $274,901
Scope of Services Provided: This project required extensive City policies and procedures reviews. Three public meetings, two public surveys, twelve City staff meetings, and other stakeholder events were completed to engage with a wide range of audiences. Additional data gathering included the inventory of 7,000 street trees and budget analysis. 5-year action strategies were developed for the 20-year UFMP, each with their own criteria and thresholds. The project included an extensive review with recommendations for the Tacoma Municipal Code (includes use of ISA BMPs and ANSI Standards). Phase 3 will consist of a Trees and Construction Operations Plan, a Tree Risk Reduction Plan, and a Sustained Funding Report. View the project website at www.tacomatreeplan.org and the final plan here.
Status: Completed

D) City of Hutchinson, KS Urban Forest Master Plan

Project Manager(s): Chris Peiffer (PlanIT Geo)
Contact Name: Justin Combs, Parks and Facilities Director
Contact Info: justin.combs@hutchgov.com | (620) 694-1912
Date: January 2019 – November 2019 (11 months) | **Budget:** $17,750
Scope of Services Provided: The Urban Forest Master Plan was prepared for the City's Tree Board in partnership with the City and community residents. To support plan development, an i-Tree Canopy assessment was completed to identify existing tree canopy and areas available for tree plantings. To refine these possible areas, PlanIT Geo completed a Tree Planting Prioritization task analyzing planting areas by determining feasibility and prioritizing them based on the following themes: socio-demographic data, air quality improvement, energy savings, and stormwater reduction. These priorities are provided on the neighborhood, census tract, and census block group levels to assist the City in preserving and enhancing tree canopy—guided by the UFMP. The UFMP also includes an assessment of the urban forest resource and program, community engagement recommendations, criteria and indicators for management, management for urban forest equity, and recommendations for shared maintenance responsibility. The urban forest assessments and findings informed short- and long-term goals that are guided by actions, responsible department(s), and an implementation timetable. View the plan here.
Status: Completed

E) City of Rochester, MN Urban Forest Master Plan (in progress)

Project Manager(s): Chris Peiffer (PlanIT Geo)
Contact Name: Jeff Haberman, City Forester
Contact Info: jhaberman@rochestermn.gov | (507) 328-2515
Date: June 2020 – (anticipated) December 2021 (18 months) | **Budget:** $55,000
Scope of Services Provided: The purpose of this project is to utilize the data from the canopy assessment to develop a public engagement supported comprehensive Urban Forest Master Plan for Rochester, applicable for the period 2021-2041. This Plan will align with other City comprehensive plans and Rochester's infill development and transit-oriented development strategies. The Canopy Coverage Analysis enable City staff to use accurate and up-to-date Urban Tree Canopy (UTC) and Potential Plantable Area (PPA) metrics to establish canopy cover targets at various geographic scales, and to develop the strategies necessary to achieve these goals. To complete the Master Plan, public meetings, surveys, research, data analyses, benchmarking research, and program auditing will be conducted. This information will inform the development of goals, strategies, actions, and adaptive management measures to make this a living document for years to come.
Status: In Progress

F) Other Completed Urban Forest Management Planning Projects

- Hutchinson, KS Urban Forest Master Plan; Iowa City, IA Urban Forest Management Plan; Memphis Regional Canopy Action Plan; Meridian, MS Urban Forest Management Plan; Alexandria, LA Urban Forest Management Plan; Hunterdon County, NJ High Risk Plan; West Virginia State University Tree Maintenance Plan; Tacoma Mall, WA Strategic Urban Forest Action Plan; Claremont, CA Urban Forest Management Plan; Laurel, MS Tree Management Program Evaluation Report; Fairfax, VA Urban Forestry Program Evaluation Report; Metro Washington, D.C. Council of Governments Tree Canopy Management Strategy; Learn more here.

TREE CANOPY ASSESSMENT PROJECTS AND REFERENCES

A) Washington, D.C., UTC Assessments and Urban Forestry Program Review

Project Manager(s): Jeremy Cantor (PlanIT Geo)
Contact Name: Brian LeCouteur
Contact Info: blecouteur@mwcog.org | (202) 962-3393
Date: October 2020 – Current | **Budget:** $95,000
Scope of Services Provided: Four years of UTC Assessments and implementation/outreach tools; land cover change analysis from 2006 to 2011 to 2015 to 2020; web-based planning tools integrating UTC data, priority planting areas, land cover classification and canopy cover forecasting; community handbook for expanding tree canopy; urban forestry program review to evaluate management activity success.
Status: Near Completion

B) Cupertino, CA Urban Tree Canopy Assessment

Project Manager(s): Jeremy Cantor (PlanIT Geo)
Contact Name: Teri Gerhardt
Contact Info: TeriG@cupertino.org | (408) 777-3200
Date: June 2019 – August 2019 | **Budget:** $33,500
Scope of Services Provided: Provided: Imagery/LiDAR-based remote sensing classification of the land and canopy cover of the City of Cupertino in 2018 and 2009; analysis of distribution of tree canopy and plantable space throughout various geographic planning scales; recommendations for policy, planning, and priority planting areas; calculated ecosystem service benefits of the canopy; analyzed correlations between tree canopy and socio-demographic indicators to prioritize new tree plantings; measured canopy change over the last decade; developed online decision support tool; wrote assessment report
Status: Completed

C) King Conservation District, WA UTC Assessment and Report

Project Manager(s): Jeremy Cantor (PlanIT Geo)
Contact Name: Ellen Arnstein, Forest Stewardship Program Manager
Contact Info: ellen.arnstein@kingcd.org | (425) 282-1929
Date: February 2018 – December 2018 | **Budget:** $128,000
Scope of Services Provided: Imagery/LiDAR-based remote sensing classification of 18 communities in the Seattle metro area; deciduous/conifer distinction; data preparation and analysis; recommendations for policy, planning, and priority planting areas; calculated ecosystem service benefits of the canopy; correlations between tree canopy and socio-demographic indicators; hydrologic modeling to measure impact of tree canopy cover scenarios; wrote customized assessment reports and 2-page fact sheets for each community; developed online decision support tool. Our agreement involved mapping and measuring tree canopy and other land cover types in many constituent cities that KCD serves. We worked directly with both KCD as well as the individual cities and provided the proposed products and services on time. We continue to work with KCD on a recurring basis.
Status: Completed

Additional local and relevant canopy projects available upon request.

TREE INVENTORY PROJECTS AND REFERENCES

A) City of Kettering, OH

Project Manager(s): TJ Wood (PlanIT Geo)
Contact Name: Gary Schussler – Parks superintendent
Contact Info: Gary.Schussler@ketteringoh.org | (937) 296-2486
Date: November 2019 – January 2020 (www.pg-cloud.com/KetteringOH/) | **Budget:** $35,000
Scope of Services Provided: PlanIT Geo conducted a city-wide tree inventory containing all trees in parks and city-maintained medians. Overall, 7,500 trees and available planting spaces were inventoried for the city. An Urban Forest Management Plan was also completed after tree inventory data collection was finished.
Status: Completed

B) Village of Libertyville, IL Tree Inventory

Project Manager(s): TJ Wood (PlanIT Geo)
Contact Name: David Thornborough
Contact Info: dthornborough@libertyville.com | (847) 918-2076
Date: February 2020 – May 2020 | **Budget**: $38,000
Scope of Services Provided: PlanIT Geo has completed a tree inventory on 11,000 trees and planting sites in rights-of-ways, parks, and open spaces for the Village of Libertyville
Status: Completed

C) Village of Western Springs, IL

Project Manager(s): TJ Wood (PlanIT Geo)
Contact Name: Christopher Breakey
Contact Info: cbreakeypw@wsprings.com
Date: May 2020 | **Budget:** $23,600 (DNR Grant Funded)
Scope of Services Provided: PlanIT Geo conducted a city-wide inventory in Western Springs' rights-of-ways for the Village of Western Springs collecting 8,000 trees.
Status: Completed

D) Iowa City, IA Parks and Forestry Tree Inventory and Management Plan

Project Manager(s): TJ Wood (PlanIT Geo)
Contact Name: Rae Lynn Schepers
Contact Info: Rae-Lynn-Schepers@iowa-city.org | (319) 356-5000
Date: Completed March 2018 (www.pg-cloud.com/IowaCity/) | **Budget**: $97,500
Scope of Services Provided: PlanIT Geo collected data on 50,000 city-owned trees within the public rights of way, parks, and open spaces in Iowa City. This inventory included a risk assessment for 8,800 trees. PG has also completed an Urban Forest Management Plan for the city.
Status: Completed

E) St. Charles County Parks, MO

Project Manager(s): TJ Wood (PlanIT Geo)
Contact Name: Nick Dziuba
Contact Info: ndziuba@sccmo.org
Date: April 2016 | **Budget:** $16,000 (TRIM Grant Funded)
Scope of Services Provided: PlanIT Geo conducted a county-wide inventory in all county owned parks. Plan IT Geo assessed over 4,000 trees in total.
Status: Completed

Additional local and relevant inventory projects available upon request.

RESUMES

CHRIS PEIFFER

Director of Urban Forestry Consulting Services, PlanIT Geo

Professional Summary

Chris specializes in urban and rural forest planning, management, development, and innovation. Chris is experienced in the collection of tree inventory data, inventory data synthesis and analysis, tree selection, urban and rural forest conservation / preservation / restoration, multi-organization project management, and urban forest management plan writing. His planning experience includes urban forest management-master plans, regional canopy action plans and strategies, strategic planting plans, analysis and reporting of tree inventories, and Urban Tree Canopy (UTC) reports. In the past 7 years, Chris has managed urban forestry planning projects with budgets totaling over $1 million.

Chris specializes in strategic assessment and planning of natural resources, resulting in long lasting positive impacts on communities and the environment. With four years of public service and a combined 11 years in the private sector, Chris understands both sectors' perspectives, enabling effective collaboration to achieve successful projects and programs and deliver sustaining results.

Chris is also an expert arborist and seasoned field crew manager with experience from leading tree care firms, understanding the maintenance needs, tree physiology, and tree responses to proper care.

Chris Peiffer has managed or continues to manage projects with budgets totaling over **$1 million** in the past 7 years. As of March 2022, urban forest planning projects have directly engaged over **6,200 community residents** and a total of **203 city staff** have been interviewed representing **63 different departments**.

Education

Bachelor of Science, Urban Forestry- Pennsylvania State University (2009)

Professional Certifications

Certified Arborist and Municipal Specialist International Society of Arboriculture (PD-2070AM)
Graduate of 2011 Municipal Forestry Institute (MFI)
2013 Urban Forestry Institute
2014 Urban Forest Strike Team

Relevant Skills and Expertise

Director of Urban Forestry Consulting Services, PlanIT Geo (2014 – Present)
As Director of Urban Forestry Consulting Services, Chris provides urban forestry services for communities, organizations, and private firms. His expertise includes urban and rural forest management, planning, software, and innovation. In this role, Chris works with small and large communities, statewide agencies, and non-profit organizations to enhance urban and rural forest management through projects such as strategic tree planting, tree inventories, management plans, canopy plans, tree conservation and restoration, tree and maintenance specs and ordinances, and regional planning.

References

Mike Carey, City of Tacoma, WA | (253) 404-6989 | mcarey@ci.tacoma.wa.us
Dennis Will, City of Colorado Springs, CO | (719) 385-6550 | dennis.will@coloradosprings.gov
Kerry Rappold, City of Wilsonville, OR | (503) 570-1570 | rappold@ci.wilsonville.or.us

Relevant Projects

Urban Forest Management Plan, Colorado Springs, CO (2020): This plan provided the framework for enhancing the City Forestry Division's levels of service as it relates to the management of the urban forest and meeting community goals. The planning process includes an extensive analysis of the existing conditions and operations by using the U.S. Forest Service's Urban Forest Sustainability and Management Audit. The Audit is informed by information gathering via city staff interviews, public meetings, data analyses, and benchmarking research. The results of the planning included guidance for and impacts of multiple management scenarios and recommended management approach to achieve long-term goals for sustainability. Project includes extensive review of City Code and policies to provide recommendations. Includes analysis of costs deferred maintenance, estimated costs for a 7-year rotational pruning program, staffing and budget requirements, EAB plan, and fact sheets. View the plan here, the Research Summary, and the UFMP Fact Sheet.

Tacoma, WA Urban Forest Management Plan (2019): Chris managed this project that includes a sample tree inventory across the City, existing conditions and operations audit, data analysis, urban forestry program benchmarking, municipal code review and recommendations, a series of community meetings and multiple public surveys, community outreach strategies, and an urban forest management plan website. The final plan provides a Research Summary and the Management Plan with short and long-term implementation strategies, a Tree Risk Reduction Plan, Trees and Sidewalks Operations Plan, and a Sustained Funding Report.

Tacoma Mall, WA Strategic Urban Forest Action Plan (2020): The information in this Action Plan led by Chris is provided to guide future maintenance and management, aligned with the Citywide Urban Forest Management Plan (2019), to better plan for the health and longevity of the Tacoma Mall's urban forest. The project includes an inventory of trees in the Tacoma Mall Subarea, an analysis of tree data, tree canopy assessment summaries, priority planting areas, and recommendations for outreach and management of the trees in the Tacoma Mall area.

Claremont, CA Urban Forest Management Plan (2019): This project, led by Chris, included 6 community outreach meetings and surveys, city staff interviews, external stakeholder engagement, tree canopy assessment and analysis to inform canopy and plan goals, and tree and vacant site inventory analysis. The plan focuses on climate change resiliency, sustained funding, staffing structure, trees and sidewalk conflicts, canopy goals, private tree care and pest management, improved maintenance, recommended maintenance cycles, tree policy manual reviews and recommendations, pest and disease management, increased partnerships, and community outreach and engagement. View the plan here.

JEREMY CANTOR

Director of Geospatial Services

Jeremy leads the geospatial team on urban tree canopy assessments, green infrastructure analyses, and other GIS and remote sensing projects. He has managed 60 urban tree canopy (UTC) assessments and contributes to GIS modeling, remote sensing analysis of multispectral and LiDAR imagery, data production, IT, cartography, and web/mobile mapping app design. Jeremy also has seven years of federal government experience working with ocean and coastal resources in the National Park Service focusing on coastal systems, resource assessments, and web mapping design.

Education

Master of Natural Resources Stewardship in Spatial Information Systems | Colorado State University, 2010 Bachelor of Arts in Geography, Economics Minor | University of Vermont, 2006

Geospatial Projects

Urban Tree Canopy Assessments

Jeremy has led and managed accurate and comprehensive analyses to assess the current status of tree canopy and available planting space. Tasks managed included remote sensing classification, canopy analysis, GIS mapping, tree planting prioritization, summary reports, and web map design. Communication, training, and presentations of project deliverables were provided throughout the project and upon completion.

Million Trees Miami: Miami-Dade Canopy Action Plan and Interactive Online Tree Tool

Served as a GIS analyst and web designer to provide an online engagement tool for the public and tree managers to view existing canopy, plan priority reforestation efforts based on environmental, health, and socioeconomic data, and track newly planted trees as a means to achieve local and regional canopy goals. (https://pg-cloud.com/MillionTreesMiami/)

Denver, CO: South Platte River Urban Waters Partnership Natural Capital Grant Project

Served as a GIS analyst on a multidisciplinary team to map and evaluate the regional network of green infrastructure in Colorado's South Platte River watershed. Derived spatial data were used to develop a tool to prioritize key areas for conservation and restoration based on the ecosystem services that the natural resources provide (https://pg-cloud.com/NaturalCapital/).

Washington, D.C.: Community Forestry Resource Guide, Canopy Strategy, and Management Handbook

Contributed textual content, graphics, and styling to this document which provided a strategy for managing the region's urban forest and a handbook to guide Metro Washington Council of Government's approach to community engagement and outreach as it relates to education and encouraging tree planting, protection, and engagement strategies. The handbook also included an i-Tree demonstration project and user guide for i-Tree Canopy.

TreePlotter™ CANOPY Product Owner

Jeremy has managed an iterative re-design of our interactive canopy mapping and decision support web application formerly known as Canopy Planner. Over the course of the last three years, various GIS functionality has been added and graphic design elements have provided a fresh look to make the software more user-friendly with additional features and smoother functionality. Jeremy has also been instrumental in the design of our modern web portal used to display tree canopy data in a lightweight, mobile-friendly web platform.

TJ Wood

Director of Field Services

Professional Summary

TJ directs PlanIT Geo's tree inventories and other field services. He has provided project management for 80+ tree inventories ranging from South Florida to the Pacific Northwest. These inventories, mitigation reports, and risk assessments have accounted for over a half million trees in each US climate zone. TJ graduated with a degree in Landscape Architecture and is proficient with the design and planting plan process. He speaks at conferences across the country and demonstrates best practices while in the field. He has over 10 years of experience performing and managing tree inventories and has been an ISA Certified arborist for 6 years.

Education

B.S. Landscape Architecture
Colorado State University, 2013

Professional Certifications

International Society of Arboriculture: Certified Arborist #RM-7676A
International Society of Arboriculture: Tree Risk Assessment Qualification

Memberships/Affiliations

International Society of Arboriculture - Rocky Mountain Chapter
American Society of Landscape Architecture

Featured Projects

Fremont, CA (2020)
Inventory Project Manager for 75,000 trees and plantings sites within public rights-of way and parks. TJ managed 9 Tree Inventory Specialists/Technicians and set daily routes and expectations. This project will be completed by August 2020 and could have more than 100,000 features mapped. All inventory data will be used to inform a management plan in 2021.

Prince George's County, MD (2017 - 2018)
Inventory Project Manager for 176,000 trees within public rights-of way managed by the county. TJ managed 6 Tree Inventory Specialists/Technicians and set daily routes and expectations. Over 68,000 level 2 risk assessments were performed for this project on 2,000+ linear roadway miles. This is an ongoing project with the county and newly planted trees will be added to the database and planting practices will be audited.

Longview, WA (2018)
Inventory Project Manager for the collection of 12,000 trees and 4,000 planting spaces in Longview's street rights-of-way and park system. All work was completed in less than two months with a crew of three ISA Certified Arborists.

Charlotte, NC (2018)
Inventory Project Manager for the collection of 20,000 right-of-way trees. Managed a crew of 4 ISA Certified Arborists. Each oak (Quercus species) above 20 inches in diameter was sounded for internal decay and had a level 2 risk assessment performed.

Ritz Carlton - Dorado, Puerto Rico (2018)
Teamed with Earth Advisors, LLC (Hollywood, FL.), TJ managed a crew of 4 Certified Arborists to conduct a damage assessment for an insurance claim after Hurricane Maria surged through the Caribbean causing millions in damage to resorts. Over 8,000 trees and palms were surveyed and assessed for damage within resort boundaries.

Iowa City, IA (2016-2017)
Inventory Project Manager for collection of 50,000 trees in public rights-of-way, parks, and trail systems within Iowa City. Managed and set routes for 4 Tree Inventory Technicians based in Iowa City. The City utilized this data in the formation of an Urban Forest Management Plan that set goals and prioritized maintenance for its public trees.

Loveland, CO (2015 -2017)
Inventory Project Manager for the collection of 12,000 street right-of-way trees within the city limits. All trees were collected in a four phase project. Appraisal values were collected for each tree to help the City value it's street tree population.

Colorado Springs, CO (2018)
Inventory Project Manager for collection on 5,000 street right-of-way trees. The project was a statistical sample of trees in two distinct areas of the city with high and low canopy percentages. The city plans to expand the inventory over the next few years in hopes to collect data on all trees within public spaces.

Joplin, MO (2016)
Inventory Project Manager for collection of 6,250 city-managed trees in all parks and street ROW. This inventory was the first to be conducted after the devastating 2011 tornado that destroyed the City and it's urban forest. TJ also provided Tree Plotter Software training to city staff while on site for surveys.

Other Inventory Projects and Tree Counts

Troy, NY: 11,000 trees
Bozeman, MT: 10,000 trees
Audubon Zoo/Park, New Orleans, LA: 3,500 trees
Annapolis, MD: 5,000 trees
St. Charles County, MO (2016): 4,400 trees
West Virginia University, WV: 2,300 trees
Valencia Reserve, FL: 3,000 trees,
Deerfield Beach, FL: 1,700 trees
Sanford, FL: 2,000 trees
Columbia Association, MD: 1,900 trees
Rock Springs, WY: 4,000 trees
Green River, WY: 2,100 trees
Lakeway, TX: 3,000 trees
Highlands Garden Village, CO: 400 trees
Hunter Douglas Corporate Campus, CO: 600 trees
Jehn Engineering/Outdoor Design Group, CO Mitigation Assessments: 5 sites with 200 trees
Sedalia, MO: 1,800 trees
Spring Hill Cemetery, WV: 1,500 trees

BILLING RATES

Staff	Title	Rate (per hour, USD)
Directors		
Jeremy Cantor	Director of Geospatial Services	$125
TJ Wood	Director of Field Services	$125
Chris Peiffer	Director of Urban Forestry Consulting Services	$125
GIS		
Ben Wittman	Geospatial Data Manager	$90
Morgan Garner	GIS & Natural Resources Specialist	$80
Tree Inventory		
David McCauley	Tree Inventory Crew Leader	$90
Nate Cummings	Tree Inventory Specialist	$80
Rocky Yosek	Tree Inventory Specialist & Urban Forestry Consultant	$90
Consulting		
Rachel Ormseth	Urban Forestry Solutions Consultant	$100
Alexandria Hancock	Urban Forestry Climate Consultant	$110

PLANIT GEO™

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