

# URBAN FORESTRY 2020

Insights into Professionalism, Higher Education, and  
Career Advancement

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# ACKNOWLEDGMENTS



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# PRESENTATION OUTLINE

- What is Urban Forestry 2020?
- What did we examine in Urban Forestry 2020?
- What did we discover in Urban Forestry 2020?
- What is next for Urban Forestry 2020?



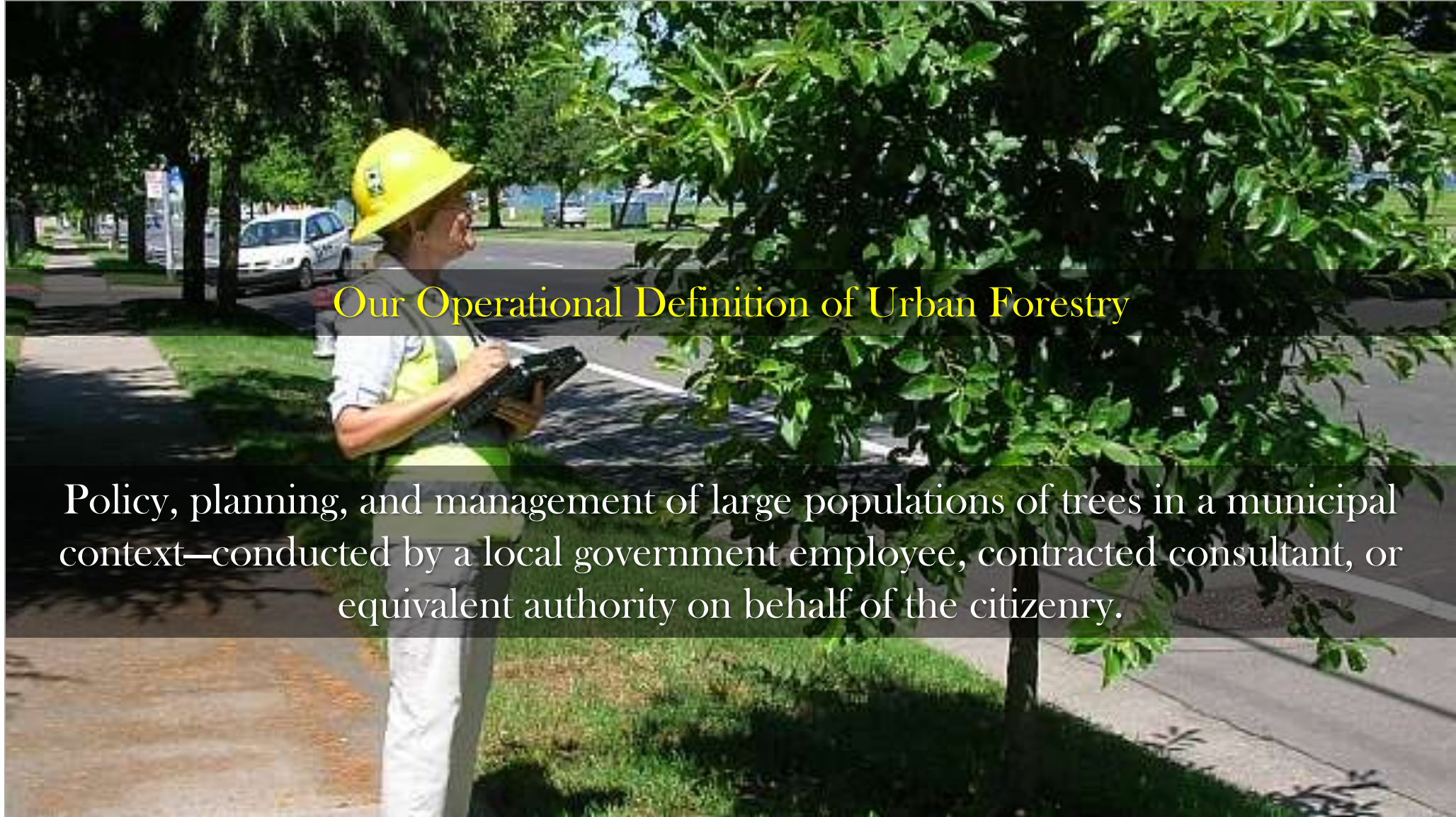
# WHAT IS URBAN FORESTRY 2020?

- Multi-institution study of urban forestry higher education and professional practice
- Funded by the U.S. Forest Service on recommendation of the National Urban and Community Forestry Advisory Council (NUCFAC)
- Guided by 20-member steering committee representing diverse national stakeholder groups
- Employed various study methods on national scale: literature review, surveys, focus groups, and interviews
- Goal: Provide empirical basis for strategic recommendations on advancing the profession





# WHAT IS URBAN FORESTRY 2020?



## Our Operational Definition of Urban Forestry

Policy, planning, and management of large populations of trees in a municipal context—conducted by a local government employee, contracted consultant, or equivalent authority on behalf of the citizenry.



# WHAT IS URBAN FORESTRY 2020?



## How is Arboriculture Professionally Different from Urban Forestry?

- Strong professional identity with the public
- Full complement of professional support mechanisms
  - Well-defined body of knowledge
  - Well-delineated career ladder
  - Robust membership organization
- Professional preparation and training needs are different

# WHAT DID WE EXAMINE IN URBAN FORESTRY 2020?

## **Urban Forester Career Paths and Networking**

- Nationwide survey of 524 municipal tree managers
- Who manages urban forests and what are their perceptions

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- Nationwide survey of 1,000 students at 18 universities
- Previous knowledge, impressions, and career choice

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## **Employer Expectations for New Hires**

- Nationwide survey of 200 urban forestry employers
- Expected skills of new hires and their proficiency



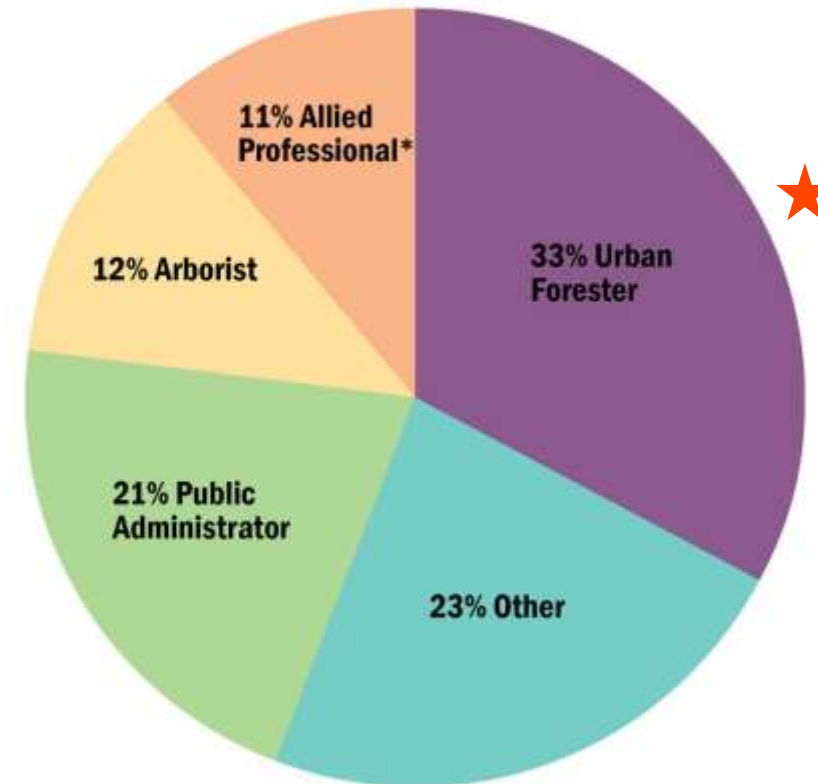
# WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

## Urban Forester Career Paths and Networking

### OF THE 524 RESPONDENTS,

- ★ • 91% white, 78% male, median age: 52
- ★ • Only 15% had seriously considered a career in urban trees and greenspaces in high school or earlier
- 75% in a supervisory role (mid to upper management)
- ★ • 82% in profession for 10+ years and 47% for 21+ years (mid to late career)
- Top memberships: International Society of Arboriculture (59%), Local urban forestry group (38%), Society of Municipal Arborists (28%), National Recreation and Park Association (22%)
- 17% didn't belong to any of the 25 professional organizations we asked about.

### Professional Identity of Municipal Tree Managers in the U.S.



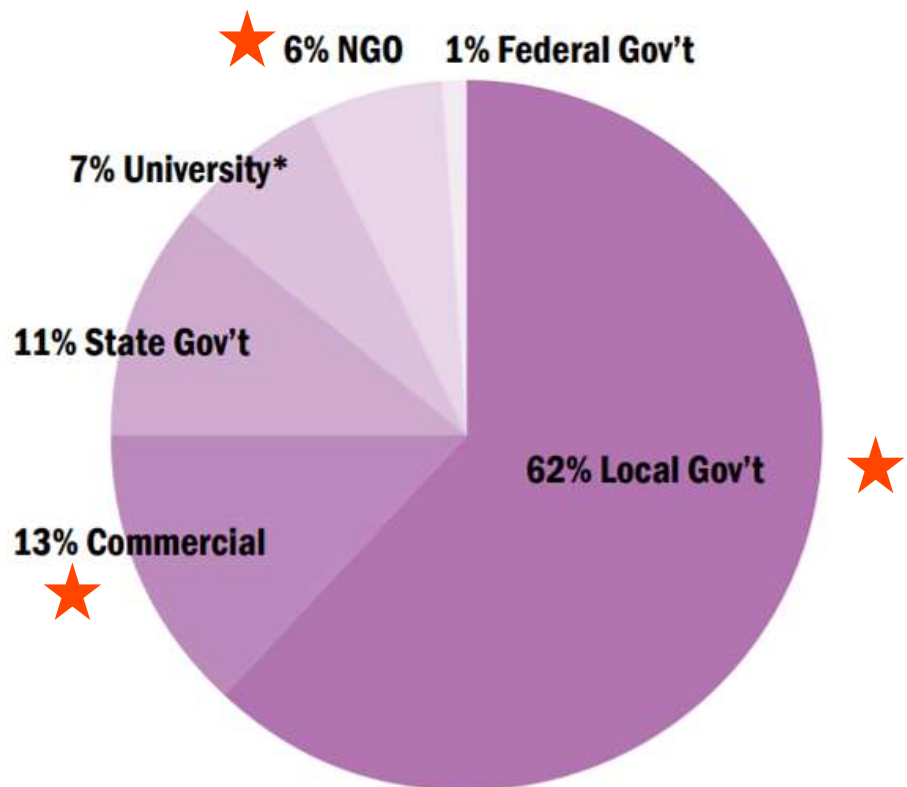
1. Lack of professional management
2. Professional encroachment

\* Such as civil engineer, landscape architect, and urban planner

# WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

## Urban Forestry Job Postings

### WHO ARE THE EMPLOYERS?



\* Teaching positions were intentionally excluded from all consideration

### MOST COMMON WORDS IN JOB TITLES

- ★ **26%** ... included *urban forest, forestry, or forester*
- 23%** ... included *forest, forestry, or forester* but WITHOUT the words *urban, or community*
- 17%** ... included *arborist, arboriculture, or arboricultural*
- ★ **14%** ... OMITTED any reference at all to *forestry, urban forestry, arboriculture, or trees*

### TOP PREFERRED DEGREES

These are the top degrees mentioned by name in the postings. (% of total postings)

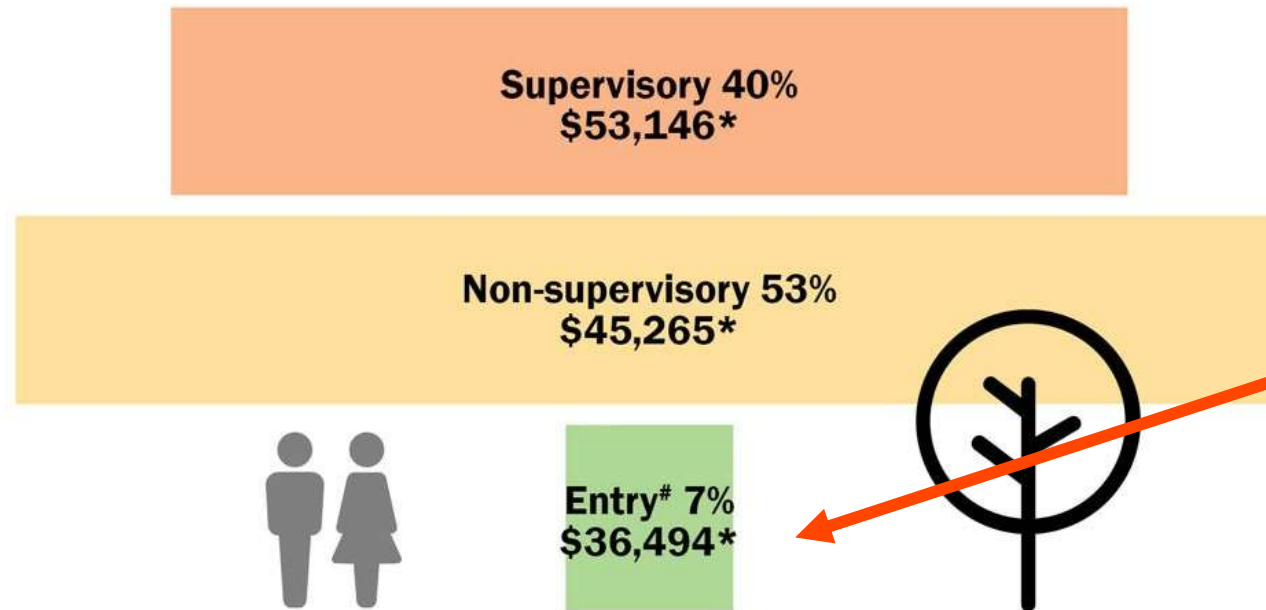
- 57% Forestry
- 40% Horticulture
- ★ • 35% Urban Forestry
- 25% Arboriculture
- 17% Environmental Science



# WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

## Urban Forestry Job Postings

### Breaking Down the Urban Forestry Career Ladder



\*Average annual income

#Entry level was defined requiring 1 year or less of experience.  
All positions that fell into this category required a degree.

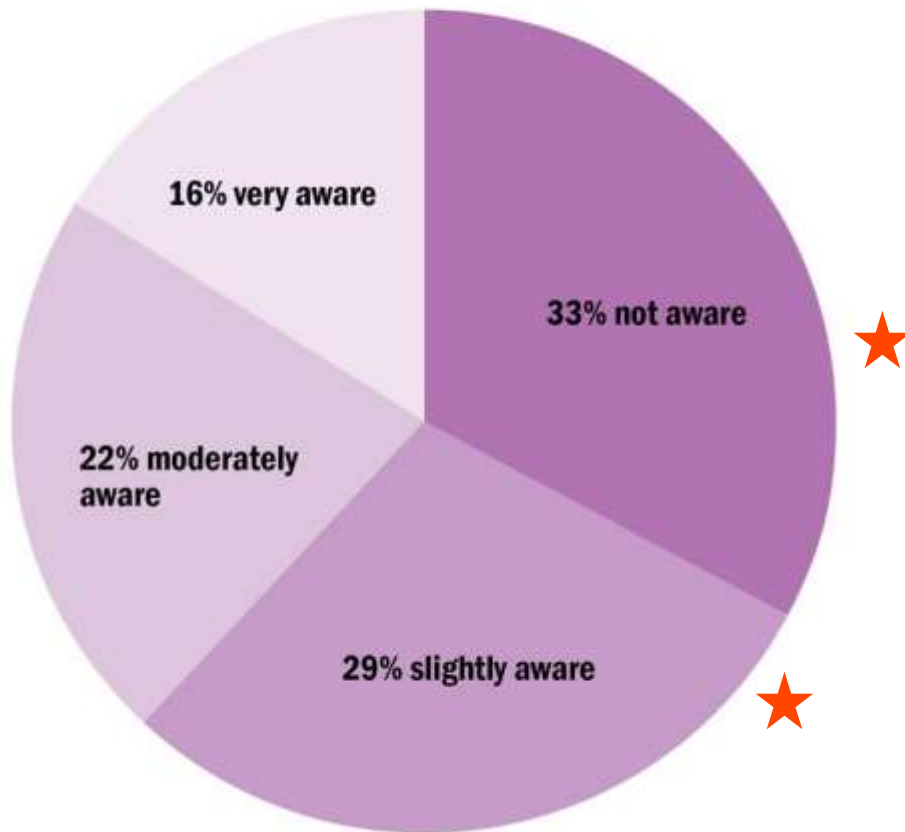
Field production arborist, particularly with commercial tree care companies, is the surrogate entry-level position for degreed young professionals.

This is a strong filter for diversified talent into the urban forestry profession and may not be a reliable precursor to proficiency.

# WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

## University Student Perceptions

### U.S. College Student Awareness of Urban Forestry



### Which College Students are More Aware of Urban Forestry



Suburban students are the least aware of urban forestry. ★



Men are more aware of urban forestry than women.



Students who participate with their families in outdoor nature-based activities are more aware of urban forestry.



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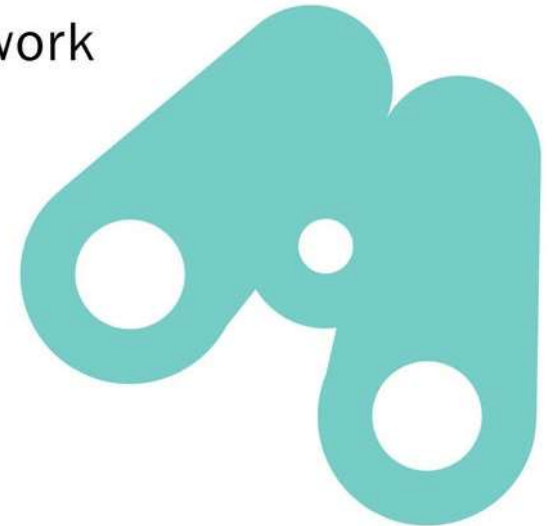
### ONCE STUDENTS LEARN ABOUT URBAN FORESTRY—WHAT DO THEY THINK?



- After watching a brief video about a career in urban forestry, students had a favorable impression overall.
- Race and ethnicity have no influence on impression of urban forestry, but African-American students place greater importance on pay and prestige as well as career support from a professional society.
- Students from high-income families (>\$150K per year) and those who care more about pay and prestige have the least favorable impression of urban forestry.

### What Do College Students Seek in a Career?

- To have **PASSION** and **ENTHUSIASM** for the work
- For the work to be **MEANINGFUL**
- Having **OPPORTUNITIES** or new challenges
- Having a definable **CAREER LADDER**



# WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

## Employer Expectations for New Hires

### Majors of Entry-Level Urban Foresters Most Valued by U.S. Employers



### Credentials of Entry-Level Urban Foresters Most Valued by U.S. Employers



# WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

## Employer Expectations for New Hires

### WHERE EXPECTATIONS ARE NOT MET

These skills were highly valued but recent hires did *not* meet employer's expectations



#### Managerial

- Employee supervision

#### Technical

- Root management and root pruning
- ★ • Tree assessment and risk management
- Tree disorder diagnostics



#### Communication

- ★ • Conflict resolution
- Public relations/customer service





# WHAT IS NEXT FOR URBAN FORESTRY 2020?

- Comprehensive project website to be launched next month: [www.uf2020.frec.vt.edu](http://www.uf2020.frec.vt.edu)
- Comprehensive summary report to be published on the website next month
- Currently have 3 peer-reviewed publications:
  - 1 at Journal of Forestry (in press)
  - 2 at Urban Forestry & Urban Greening (in revision)
- Recommendations for Strategic Action are currently under review by our steering committee



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