CNUC

East Providence Street Tree Inventory Update

RIDEM

MONDAY 10/2/23

CITY OF EAST PROVIDENCE RHODE ISLAND INCORPORATED MARCH 1, 1862 PRO BONO PUBLICO

YOUR PARTNER IN INNOVATIVE SOLUTIONS

Thank You

TREE EQUITY SCORE	=	TREE CANOPY NEED: TREE CANOPY GOAL	–	EXISTING CANOPY	x	PRIORITY

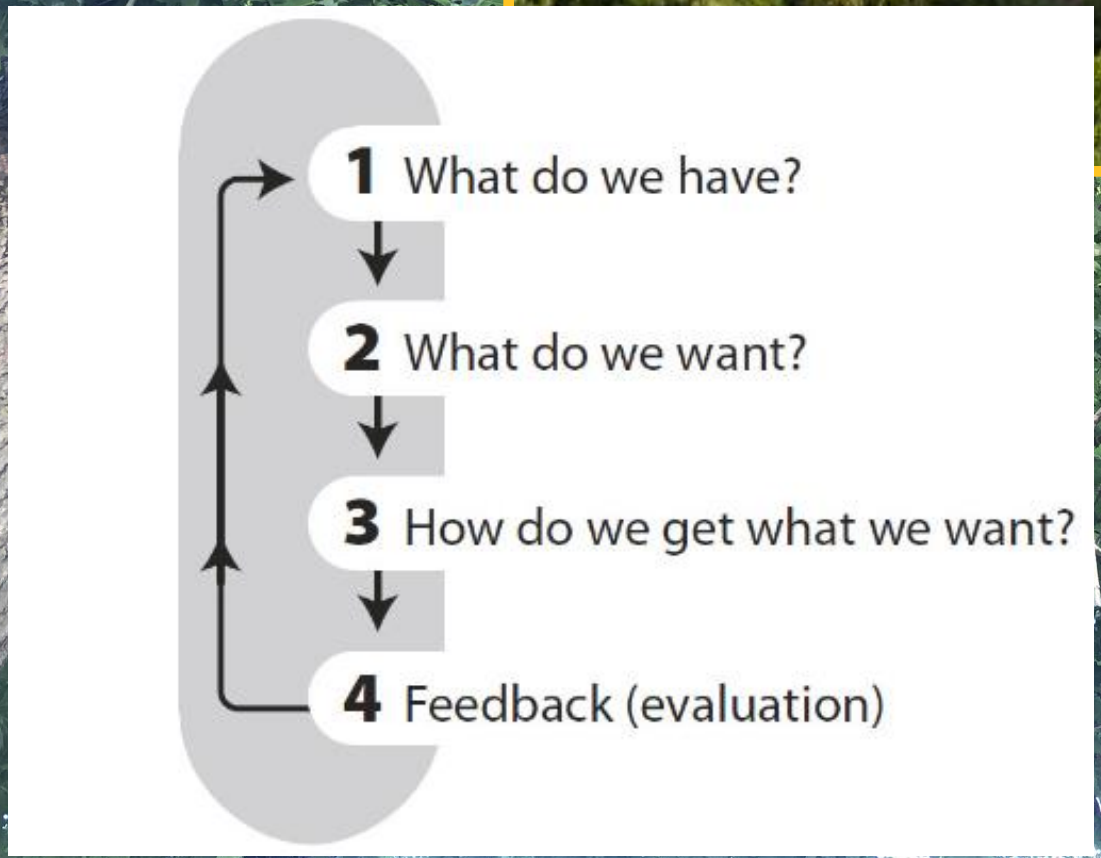
https://www.treeequityscore.org/

CNUC

Thank You

USDA FOREST SERVICE

URBAN AND COMMUNITY FORESTRY GRANTS



Miller, R.W., R.J. Hauer and L.P. Werner. 2015. *Urban Forestry: Planning and Managing Urban Greenspaces.* Third ed. Waveland Press, Inc., Long Grove, IL.

CNUC

CNUC Team

CERTIFIED ARBORIST ISA

BOARD CERTIFIED MASTER ARBORIST ISA

ISA QUALIFICATIONS ™

MUNICIPAL SPECIALIST ISA

UTILITY SPECIALIST ISA ® ™

SAF CERTIFIED™

asca
AMERICAN SOCIETY of CONSULTING ARBORISTS®

CNUC

Project Background & Steps

- Background:
  - Street Tree Inventory Data Collected in 2021
  - Volunteers and College Intern
  - 6,376 Street Trees Identified

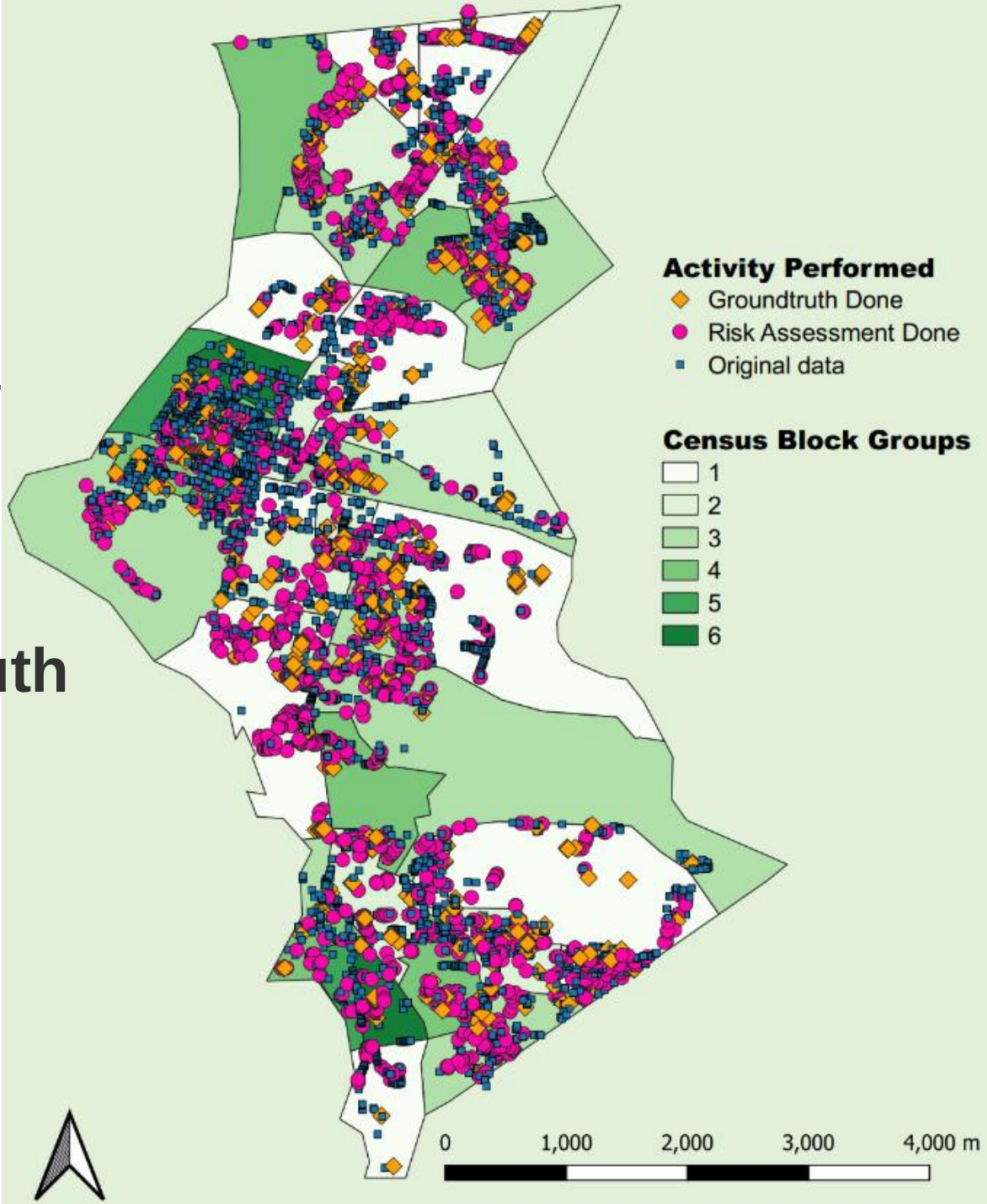
- Current Project Steps
  1. Data Cleanup
  2. Groundtruthing
  3. Tree Risk Assessments
  4. Recommendations & Analysis

CNUC

Step 1: Data Cleanup

- Missing Data
- Incorrect Data
- Improbable Data

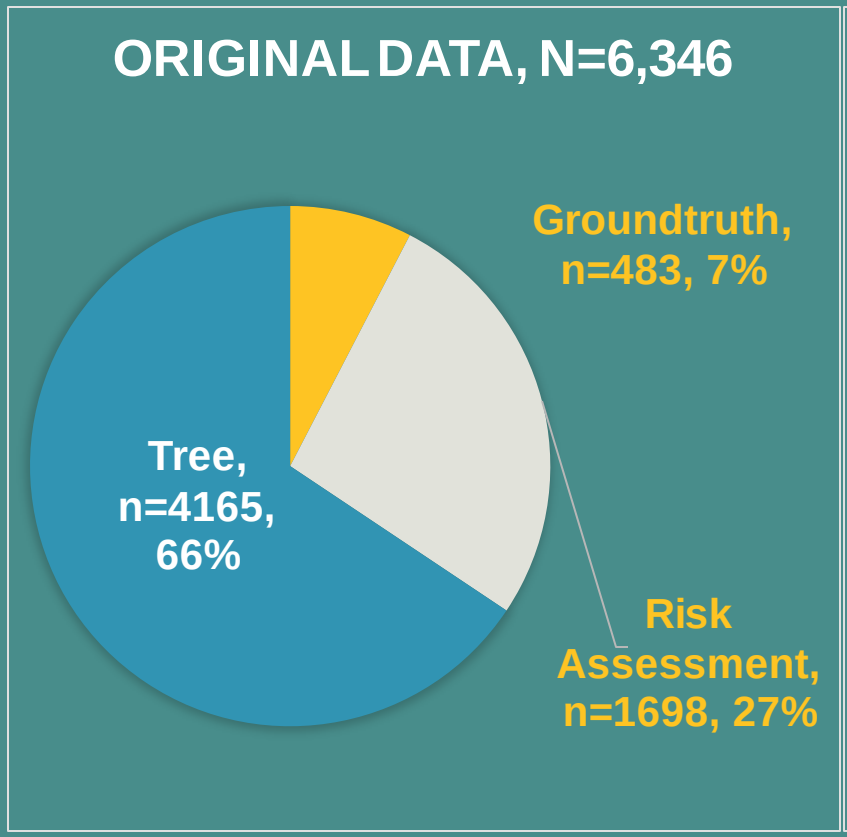
- 483 Groundtruth
- 1,698 Risk Assessment

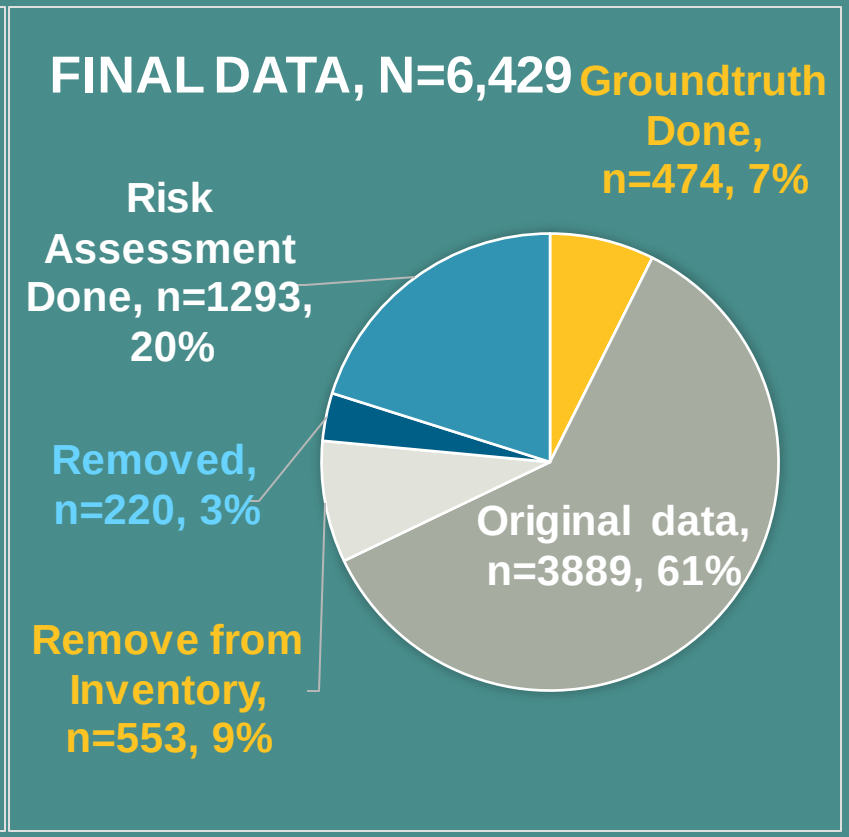


Step 2-3. Collect Data

- Standard Equipment
  - iPad with Inventory Software
  - DBH Tape
  - PPE/Vehicle/Phone
- Additional Equipment
  - Rangefinder
  - Mallet
  - Probe

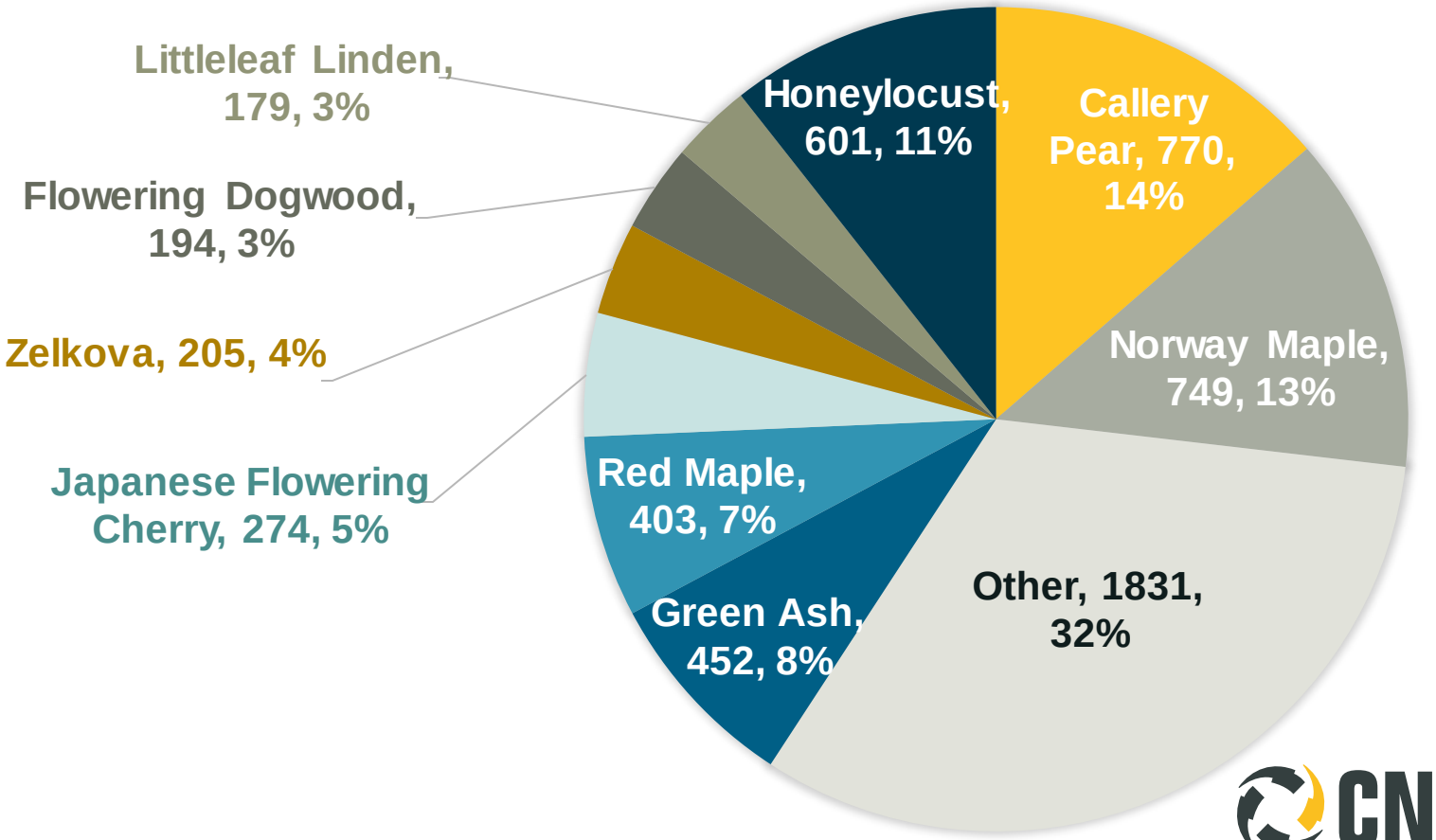
Step 4: Analysis & Recommendations





Step 4: Analysis & Recommendations

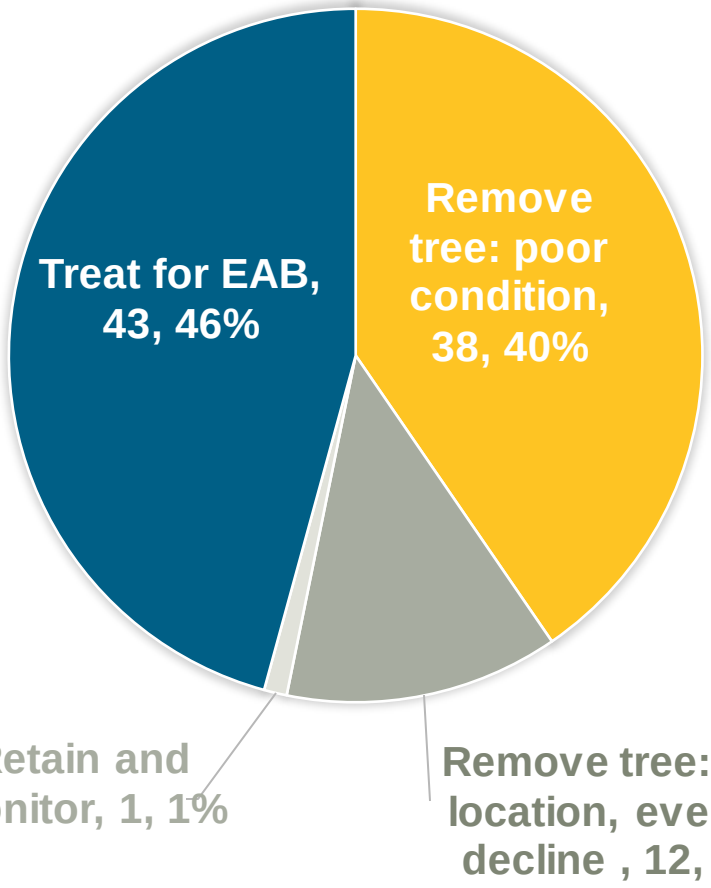
- Species Diversity
  - 95 Species Total



CNUC

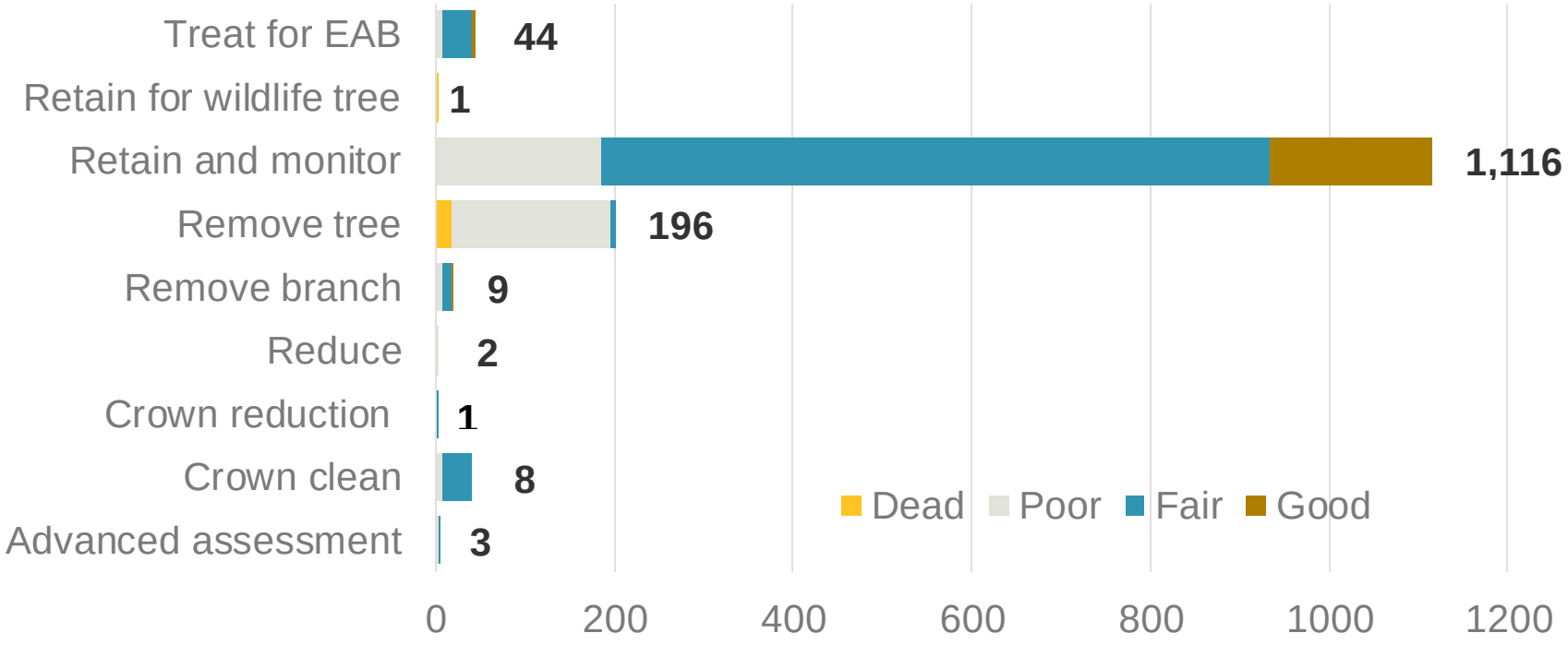
Step 4: Analysis & Recommendations

- Ash Trees
  - 91 surveyed



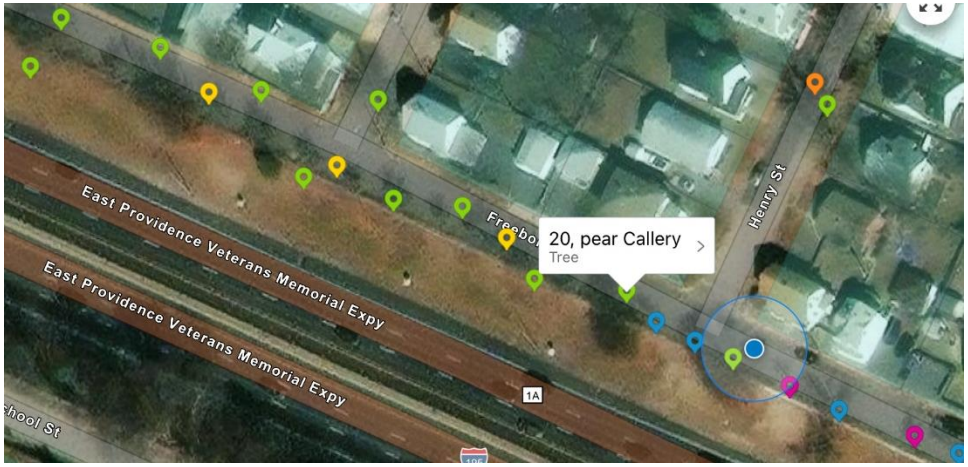
Step 4: Analysis & Recommendations

- Risk Tree Management
  - n=1,433 Trees



Step 4: Analysis & Recommendations

- GIS Software & Training



Step 4: Analysis & Recommendations

- **i-Tree Eco Analysis**
  - Number of trees: 5,656
  - Tree cover: 81.43 acres
  - Pollution removal: 2.362 tons/year ($27.3 thousand/year)
  - Carbon storage: 4.383 thousand tons ($748 thousand)
  - Carbon sequestration: 77.21 tons ($13.2 thousand/year)
  - Oxygen production: 205.9 tons/year
  - Avoided Runoff: 1.215 million gallons/year ($10.9 thousand/year)
  - Replacement value: $16.8 million

CNUC

Step 4: Analysis & Recommendations

- Grow the Urban Forest



Questions?

CNUC