INTRODUCTION

- Elm Heights Neighborhood Association identified an existing need for a succession plan for older trees being removed from the ROW.
- Goals:
  - Information gathering
  - Community development
- Our project is helping to provide the NA with a solution to their problem by presenting data that can help them strengthen their case for a succession plan for older trees being removed from the ROW.

STREET TREE INVENTORY

- A 4-block by 3-block section of Elm Heights was chosen to represent the entire neighborhood, for the purpose of this study. This area reached from 2nd St E to 1st St E, and Henderson St S to Walnut St S.
- Trees along the public right-of-way were surveyed.
- We collected the following data: Address, DBH (diameter at breast height), condition of the tree, suggested maintenance, the presence of an overhead power line, and any additional comments.

RESULTS

- Data collected on a total of 122 trees.
- The most frequent tree species were Littleleaf linden (*Tilia cordata*) at 21% followed by Red maple (*Acer rubrum*) at 15% (Figure 3).

RESULTS CONTINUED

- The majority of trees in Elm Heights are in Good or Fair condition (Figure 4).
- However, nearly 30% of trees are either "Poor" or "Dead".
- 5% of trees have been removed since 2007, indicating possible sites for replanting.
- We noted five trees as requiring a priority 1 prune (Figure 5).

COSTS/BENEFITS OF ELM HEIGHTS STREET TREES

- Littleleaf linden, average DBH= 15"
  - Average benefits= $52 per tree per year
- Red maple, average DBH= 11"
  - Average benefits= $72 per tree per year
- Ginkgo, average DBH= 10"
  - Average benefits= $64 per tree per year

COMPARISON OF 2007/2016 STREET TREE SURVEYS

- Figure 6. Size distribution in 2007 area street trees. Distribution is skewed towards the left, meaning there are many more smaller trees than larger trees.
- Figure 7. Size distribution in 2016 area street trees. Distribution is closer to a normal distribution, meaning there is a relatively large amount of mid-size trees.

ANALYSIS & RECOMMENDATIONS

Analysis:

- There are a number of older trees; however the main issue is lack of care in all life stages (young through mature), including:
  1. Girdling roots
  2. Broken/dangling branches
  3. Lack of care early in life - central leader never chosen, leaning or crooked trees, lack of early pruning/training leading to unstable branches over streets and sidewalks
- Species composition is relatively diverse; some species (Littleleaf & Red Maple) should be reduced
- Existing space are not being fully utilized. Within our sampling area, these spaces include:
  - 700 & 800 block of Fess Ave S
  - 700 block of Henderson St S
  - 500-700 block of Fess Ave S
  - 600 & 700 block of Park Ave S
- Residents are enthusiastic and interested in learning how to expand & sustain the urban canopy
- Project (inventory and grant proposal) acts as community development-involves residents in bettering their community.

Recommendations:

- Neighborhood Association should include these 4 main priorities in grant applications:
  1. Tree care early in life, including volunteer training, pruning, & selection of leader.
  2. Continuing to plant a variety of species (30-20-10)
  3. Pruning over highly-trafficked streets and sidewalks
  4. Utilizing existing spaces that are prime locations for trees (see list above)

- May also be beneficial to meet with City officials to stress the importance of these plans.
- Explore the possibility of community pruning training & classes, including those offered through:
  - City of Bloomington
  - Hilltop Campus Gardens
  - Bloomington Community Orchard