Denton’s Urban Forest

• Public trees
  ○ Parks & natural areas
  ○ Trees at city facilities
  ○ Medians and along some arterials

• Private trees
  ○ Residential
  ○ Commercial
  ○ Industrial

• Neighborhood trees
  ○ Planted by the City, responsibility of the Property Owner
Developing the Urban Forest Master Plan

- Scope and Purpose
  - Guidance for City property, public right-of-way, & critical habitat areas
  - Long- and short-term goals
  - Adaptive management principles
Developing the Urban Forest Master Plan

• Why is a Master Plan important?
  ○ Illustrates the value and benefit of community trees
  ○ Communicates challenges and opportunities
  ○ Promotes shared vision
  ○ Ensures resources are in place to support community goals
What do we have?

- **History and Overview**
  - 1988 *Keep Denton Beautiful* Founded
  - 1990 First Arbor Day Celebration
  - 1991 Tree City USA
  - 2007 first urban forester hired
  - 2015 first tree planted from the Tree Mitigation Fund
  - 2016 State of the Denton Urban Forest
What do we have?

- **Land Cover**
  - 28% tree canopy
    - 22,540 acres
  - 14% impervious surfaces
  - 45% grass/low-lying vegetation
  - 10% bare soil
  - 1% open water

What do we have?

• Canopy by Land Use
  o 45% single-family residential
  o 38% undeveloped land
  o 35% parks & open space
  o 31% multi-family residential
  o 21% government
  o 19% industrial
  o 13% agriculture
  o 12% commercial
What do we have?

• Historic Change

<table>
<thead>
<tr>
<th>Year</th>
<th>Canopy Cover %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>20.4%</td>
</tr>
<tr>
<td>2014</td>
<td>22.6%</td>
</tr>
<tr>
<td>2018</td>
<td>27.9%</td>
</tr>
</tbody>
</table>

Canopy Cover %
What do we have?

• Regional Comparison

<table>
<thead>
<tr>
<th>Comparison Cities</th>
<th>% Canopy Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas, TX</td>
<td>29%</td>
</tr>
<tr>
<td>Denton, TX</td>
<td>28%</td>
</tr>
<tr>
<td>Flower Mound, TX</td>
<td>28%</td>
</tr>
<tr>
<td>Arlington, TX</td>
<td>22%</td>
</tr>
<tr>
<td>Plano, TX</td>
<td>21%</td>
</tr>
<tr>
<td>Garland, TX</td>
<td>11%</td>
</tr>
</tbody>
</table>

What do we have?
• Estimated Species Composition of Canopy

- Sugarberry: 21%
- Cedar elm: 18%
- Post oak: 9%
- Honey locust: 8%
- Honey mesquite: 7%
- Shumard oak: 3%
- Green ash: 4%
- Eastern red cedar: 5%
- American elm: 6%
- Other species: 18%
What do we have?

• $7.2 million in annual environmental benefits, including:
  ○ $759,000 from removal of air pollutants
  ○ $3.1 million from sequestered carbon
  ○ $1.6 million in reduced energy-related costs
  ○ $1.3 million in stormwater reduction

• To date, trees have stored 458,000 tons of carbon in woody and foliar biomass, valued at $61 million.
What do we have?

• Current Operations
  o Service requests
  o Emergency response (parks and public property)
  o Some crown thinning
  o Clearance and visibility pruning
  o Tree Planting
  o Dead and hazardous tree removal
What do we have?

- Opportunities and Challenges
  - No public tree data
  - No proactive maintenance cycles
  - Maintenance of neighborhood right-of-way trees
  - Right tree, right place
  - Increase species diversity
  - Preserve and enhance existing trees and canopy
  - Current code does not address dead/hazardous trees on private property
  - Urbanization and development
  - Increase public outreach
What do we want?

- Discussion
  - Canopy goals
  - Tree Mitigation Fund Use
  - Tree planting
  - Dead, dying, or diseased trees on private property
  - Level of care
  - Neighborhood street tree care
  - Education/outreach
    - Topics
    - Methods
What do we want?

• Canopy Goals?
  o 30% (no net loss)
  o 35%
  o 40%
  o 52% Possible Planting Area*
  o Land-use-based
  o Other

*Estimated by the State of the Denton Urban Forest Report
What do we want?

• More Trees?
  o Parks, open space, & trails
  o Streets and center medians
  o Private property
  o New developments
  o Residential areas
  o Commercial areas
  o Other
  o No more trees
What do we want?

• Level of care for public trees?
  o None, keep it natural
  o Reactive (emergency response, clearance and visibility pruning)
  o Proactive (Regular and predictable pruning cycles)
  o Plant Health Care Based (structural training for young trees, pruning cycles, etc.)
What do we want?

• Amend Municipal Code to require property owners to remove dead, dying, or diseased trees which threaten public property or safety?
  ○ Yes
  ○ No
What do we want?

• Should the City take care of neighborhood trees in the public right-of-way?
  ○ Yes
  ○ No
What do we want?

• Educational topics of interest?
  o How to plant a tree
  o How to water a tree
  o How to prune my tree
  o Which tree should I plant in my yard
  o Other
What do we want?

- Preferred method of outreach?
  - Mailers
  - Social Media
  - Demonstration areas/signage
  - Informational Booths at Community Events
  - Workshops
  - Email
  - Website
  - Other
What do we want?

• Votes
  o Green means “Go”, you like this idea
  o Yellow means “Slow Down”, you need more information or are not sure
  o Red means “Stop”, you do not like this idea
What do we want?

- How should we use the Tree Mitigation Fund?
  - Plant & maintain trees
  - Maintenance on conservation easements
  - Purchase property to preserve trees
  - City-wide tree inventory
  - Education of residents & property owners about trees
  - Other
Thank you for your time!

Dana Karcher
661-964-7148
dana.karcher@davey.com

Tina McKeand
928-246-7048
tina.mckeand@davey.com

Allison Steere
303-921-5641
allison.steerre@davey.com