So What? Actionable Tree Intelligence – How do we use it
How do we get more canopy?

- Assess every 5-10 years
- Decisions are made at the parcel
- Tree loss is an event
- Preserve what you have, gain is a process
Tree Preservation: What are the triggers?
Preservation triggers

- **Ownership**
  - Public, All

- **Size**
  - Above certain size D or C

- **Status**
  - Heritage, Street, Protected, etc.

- **Activity**
  - Development
  - Removal
  - Pruning

Not mutually exclusive – may occur in combination
LA City + County Tree Preservation

**LA City**
- **Ownership**
  - Any/All
- **Size**
  - $=> 4" DBH$
- **Status**
  - Protected (certain natives; oak+)
- **Activity**
  - Relocate or remove
- **Mitigation**
  - 1" trees = $ to removed tree(s)
  - TBD fee-in-lieu

**LA County**
- **Ownership**
  - Any/All
- **Size**
  - $=> 8" DBH$
- **Status**
  - Protected (oak)
- **Activity**
  - Damage/destroy/remove/prune
- **Mitigation**
  - Two 1" trees
  - $2,700 fee-in-lieu
Development-related (ANSI A300-Part 5)

• Existing conditions
  • Forest stand size, type
  • Protected tree size, type, location
  • Size of parcel
  • Land use/zoning
  • Forest/tree cover pre-construction

• Tree preservation plan
  • Limit of Disturbance
  • Critical Root Zones
  • Trees to be removed
  • Trees to be protected
    • Stress reduction measures
  • Trees and forest to be mitigated
Table of Protected Trees shown on plans

Canopy calculations on plans

Details for stress reduction measures for preserved trees with locations shown on plans

Existing Conditions / Tree Resource Map

Tree Preservation Plan
<table>
<thead>
<tr>
<th>Tree#</th>
<th>Type</th>
<th>Species</th>
<th>Action</th>
<th>Notes</th>
<th>Probability</th>
<th>Consequences</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heritage</td>
<td>Pin oak</td>
<td>Preserve</td>
<td>Street tree</td>
<td>Unlikely</td>
<td>Severe</td>
<td>Low</td>
</tr>
<tr>
<td>15</td>
<td>Special</td>
<td>American elm</td>
<td>Preserve</td>
<td>On adjacent property</td>
<td>Somewhat likely</td>
<td>Severe</td>
<td>Moderate</td>
</tr>
<tr>
<td>17</td>
<td>Special</td>
<td>American elm</td>
<td>Preserve</td>
<td>Co-owned</td>
<td>Somewhat likely</td>
<td>Severe</td>
<td>Moderate</td>
</tr>
<tr>
<td>18</td>
<td>Special</td>
<td>Silver maple</td>
<td>Remove</td>
<td>Co-owned</td>
<td>Likely</td>
<td>Severe</td>
<td>High</td>
</tr>
</tbody>
</table>

Risk mitigation and residual risk reported on below.
How many trees should there be on an acre?
Reforestation / Afforestation

• Maryland Forest Conservation Act
  • Seedlings/whips - 700 tpa, 8 x 8
• Fairfax County, VA
  • Seedlings - 10-15 per 1,000 ft²
• CAL FIRE Forest Stewardship Program
  • Seedlings - 680 tpa, 8 x 8 or 300 tpa, 12 x 12
• If regulated, perform to compliance requirement
• If no compliance requirement, go to state forestry agency for technical assistance
Urban planting

• Maryland Forest Conservation Act
  • 1” trees - 200 tpa
  • 2” trees - 100 tpa

• Fairfax County, VA
  • 1” – 3” trees - Dependent on credit provided in projected 10-year
Tree Canopy Table

• Chesapeake Bay Program Urban Tree Canopy BMP Expert Panel
  • 300 tpa - Assumes 10-year growth, 2.5% - 5% mortality
Mitigation

- Plant on site
- Plant off site
- Fee-in-Lieu payment
- Mitigation bank purchase
NEXT STEPS

• What additional analyses would be useful?
• How do we operationalize the data?
• Regional tree preservation consortium?
• Market segment outreach strategy?
• Use Los Angeles STEW-MAP to engage the network?
• Advocate for URBAN FIA Los Angeles?