These are the notes for a talk given by ENA Street Tree Committee at the ENA monthly meeting, Jan. 17, 2019.

**Slide 1: Title Slide**

Feel free to ask questions as we go along.

**Slide 2: Aerial View East Side PDX**

Let's start with a big picture. This is satellite imagery of Portland's east side from ESRI. Eastmoreland is the greenest neighborhood. Our tree canopy is exceptional and is a defining characteristic of the neighborhood. Why does Eastmoreland appear greener than Laurelhurst for example?

**Slide 3: Street Tree Size Distribution**

Compared to Laurelhurst:
- the planting histories are similar, the original developers planted trees 30' on center;
- the stocking levels, trees divided by total planting sites, are similar, low 80's;
- and the fraction of planting sites in strips 7-10’ in width is somewhat higher than ours.

The size distribution suggests the extra “green-ness” may be due to our currently greater proportion of mature, big trees. It's supported by a close-up look at the imagery.

Most likely, we will look more like Laurelhurst in the future, at least in the near term. Farther out, will big trees dominate our streets? Depends on whether we plant the biggest trees possible consistent with site conditions.

**Slide 4: Street Tree Inventory – 2018**

Eastmoreland's street trees and available spaces were inventoried during the summer of 2011. We have updated the inventory 3 times, most recently this past summer.

To our knowledge, this neighborhood is the only one in the city that has detailed information on the recent evolution of its street tree population.

Granted, the time period is short, only seven years, but it's long enough to see trends. Most of our information is available on the street tree website.

**Slide 5: Website – Map Tab Pop-ups**

I'd like to show you a few features of the website. Although it was designed as a web-app, it works well on phones and pads.

The landing tab for the website is a map of the neighborhood showing trees and available planting spaces. Clicking or touching any of the symbols will yield a pop-up with basic info.
There are two kinds of spaces. Black squares are spaces designated by UF in 2011 as available for planting. Undoubtedly, trees occupied many of these spaces in the past.

Red squares are vacated spaces where a tree has been removed and not replaced since we 2011. In some instances, a tree has been removed recently and the owner fully intends to plant a replacement. For most others, it's likely that the vacated space is a code violation.

**Slide 6: Vacated Spaces (2011-2017), Count = 158**

This map shows spaces vacated between 2011 and 2017. These owners have had an opportunity to replace the removed trees. In some instances, Urban Forestry may have approved a decision not to replace a tree due to clearance requirements.

**Slide 7: Website – American Elms: Existing 177, Removed 61**

An obvious use of the listing is to look up your address to see what we know, or think we know.

One can also look for nearby examples of a tree that you might want to plant.

You can also get counts. How many American elms were present in 2011? Of those trees, how many have been removed? Note that these counts include elms on city property: Duniway and those along 27th and Crystal Springs. The neighborhood does not inoculate all of these trees.

The question of how many Norway maples are in the neighborhood came up during the Nov meeting – anyone can get the answer quickly from the listing. Answer: 1007.

There are lots of questions that can't be answered with these limited options such as the number of Norway maples with dbh > 18", about 700. Send us the question or request a copy of the database.

**Slide 8: Website – Recommended Trees, N-S, E-W**

On the Plant-Prune-Remove tab, you'll find a list of recommended trees for all planting situations. In assembling the lists, Catherine Mushel attempted to satisfy the desire to have visually unifying characteristics on N-S and E-W streets while providing choice.

**Slide 9: 2018 Inventory Review – Summary Counts**

We currently have about 3400 street trees in the neighborhood, a small increase over 2011. Some might look at the 2011 and 2018 totals, and conclude that we are doing OK, but although the number of trees is about the same, the number of mature trees and the canopy extent has decreased.

We also have about 690 available spaces: about 310 could accommodate big trees. Of the other 385 spaces, 218 are in wide strips that could take moderate-sized trees.

Note that big trees can be planted in about 2200 of 4100 spaces, over half.

**Slide 10: Strip >= 6 ft and Wires = N Trees 1911, Spaces 381 (Big tree spaces)**

Existing trees and available planting spaces. Most streets have have wide strips and HV wires on one
side; hence, optimal planting would have big trees on one side and moderate sized trees on the other.

Since 2011, some very modest trees have been planted in wide strips without HV wires overhead.

**Slide 11: Strip 3 – 6 ft or Wires = Y, Trees 1469, Spaces 389 (Small/moderate tree spaces)**

For wide strips with HV lines, it would be very helpful if owners would choose trees that top out at 35' rather than 10-25'.

**Slide 12: Trees and Spaces in Strips < 3 ft Trees 62, Spaces 79**

UF is not permitting street trees in these strips. UF says that street trees have a tough time in narrow strips and suggests that owners plant yard trees instead. We don't think yard trees are a satisfactory solution.

**Slide 13: Maintaining the Street Tree Canopy Will be Challenging**

This is my most important slide. There are many factors conspiring against us.

The first is obvious. When a big, mature tree is replaced with a sapling, it leaves a hole in the canopy.

Planting of large trees under HV wires will not be permitted; hence, big trees generally will be confined to one side of the street with moderate sized trees on the other.

Some trees will not be replaced due to clearance issues, a significant one is the 5' requirement next to driveway aprons.

Re-development of individual properties and the R.I.P. will remove many spaces. When a lot is split, a single-width driveway is usually replaced with two doubles.

The recent UF decision to restrict planting permits to strips >= 3' will affect the SE part of the neighborhood especially. I'll show a map of the affected streets later.

As a neighborhood, we have our own issues. Failure to replant is common; both by owners and the city.

We have a bunch of available spaces that, if filled, would mitigate canopy loss.

The board has to figure out how to get past this stalemate. Without a unified position, we will continue to get sub-optimal street trees.

**Slide 14: 10 Most Common Trees Planted 2011-2018 Strip >= 6 ft AND Wires = N**

Oaks and elms top the list. Tupelos and dogwoods are popular. Dogwoods are not big trees!

**Slide 15: 10 Most Common Trees Planted 2011-2018 Strip < 6 ft OR Wires = Y**

Dogwoods and red maples.
Slide 16: The 12 Most Common Trees, 2018

Big increase in the numbers of oaks, ginkgoes and dogwoods. Norway maples and elms are declining. Linden numbers are stable.

Slide 17: Summary:

Fill all available spaces. Plant big trees.