Recommended Street Tree Guide
PREPARED BY THE ASHLAND TREE COMMISSION
The Ashland Tree Commission wishes to thank past tree commissioners who have contributed to the preparation of the Recommended Street Tree List. They donated time, energy, and enthusiasm to the development of the list. The Commission is indebted to Sue Anne Frank, the University of Washington Center for Urban Horticulture, Puget Sound Power and Light Company, and the Washington State Department of Natural Resources for the format of the tree profiles and for some of the information which was derived from their publication, "Urban Forestry Notebook", and adapted to this region.

A special acknowledgement goes to January Jennings, Donn Todt and Bryan Nelson for their professional contributions. They intrepidly guided the publication through its many drafts and with their passion for trees saw it through to its final form. Recognition and appreciation go to Robbin Pearce who, serving as an invaluable liaison between the City of Ashland Planning Department and the Tree Commission, has steadfastly worked with the list in its various drafts and stages of development.

**Tree Commissioners**
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Greg Covey  
January Jennings  

Donn Todt, Parks Department Liaison  
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INTRODUCTION

The Urban Forest
Ashland enjoys a heritage of tree care dating back to the pioneers. In recent years, Ashland has consistently been named Tree City USA, a prestigious and gratifying award, by the National Arbor Day Foundation. The City of Ashland wishes to enhance and extend this heritage of tree care. The City wishes to encourage tree plantings that are functional as well as aesthetically pleasing. Appropriate tree selection today will assure a delightful and diverse urban forest tomorrow.

Diversity in an urban forest is an index to its health. Since arboreal diversity is a goal, the Ashland Tree Commission has created this guide to the many species and varieties that are best suited for planting along the City’s streets or anywhere in the public right-of-way. These trees have been selected because they generally have a conservative, containable root system. In addition, they are less messy with less seed or fruit drop than many species. They also require limited care and pruning and have good resistance to most pests and diseases. Lastly, they provide shade and help create an attractive and healthy neighborhood environment.

The Recommended Street Tree List is not exhaustive. There are many additional trees that have great value as street trees. Many of these are described in the publications listed in the reference section. Trees other than those listed should be chosen to fit local conditions. The use of trees on the prohibited list for street trees is subject to approval by the Tree Commission.

Young Trees Need Special Care
The Recommend Street Tree List should be an aid to tree selection, but a healthy urban forest depends on more than correct selection. City trees depend on consistent care from the time they are planted.

Young trees are especially vulnerable under urban conditions. They are fragile and can be easily damaged. For protection, most newly-planted trees should be staked for only the first year. New trees should be deeply watered once a week for the first two summers and less often over the next two years. This will promote deep rooting as the tree will seek water further down in the soil. Fertilizers, too, should be phased out over a few years. Both over-fertilizing and over-watering lead to shallow-rooted trees which require regular “handouts” in order to survive.

Proper pruning of street trees when they are young is also important. City trees must co-exist with traffic, powerlines, buildings, and pedestrians. City ordinances require branches to be trimmed 8 feet above sidewalks and 14 feet above streets. Correct pruning is the best thing that can be done for a tree. Consult the references listed for more information about proper pruning techniques.

Site Design and Use Standards
APPROVAL STANDARDS: All development fronting on public or private streets shall be required to plant street trees in accordance with the following standards and chosen from the recommended list of street trees.
LOCATION FOR STREET TREES: Street trees shall be located behind the sidewalk except in cases where there is a designated planting strip in the right-of-way, or the sidewalk is greater than 8 feet wide. Street trees shall include irrigation, root barriers, and generally conform to the standards established by the Department of Community Development.

SPACING, PLACEMENT, AND PRUNING OF STREET TREES: All tree spacing may be made subject to special site conditions which may, for reasons such as safety, affect the decision. Any such proposed special condition shall be subject to the Staff Advisor’s review and approval. The placement, spacing, and pruning of street trees shall be as follows:

1. Street trees shall be placed at the rate of one tree for every 30 feet of street frontage. Trees shall be evenly spaced, with variations to the spacing permitted for specific site limitations, such as driveway approaches.

2. Trees shall not be planted closer than 25 feet from the curb line of intersections of streets or alleys, and not closer than 10 feet from private driveways (measured at the back edge of the sidewalk), fire hydrants, or utility poles.

3. Street trees shall not be planted closer than 20 feet to light standards. Except for public safety no new light standard location shall be positioned closer than 10 feet to any existing street tree, and preferably such locations will be at least 20 feet distant.

4. Trees shall not be planted closer than 2 1/2 feet from the face of the curb except at intersections where it shall be 5 feet from the curb, in a curb return area.

5. Where there are overhead power lines, tree species are to be chosen that will not interfere with those lines.

6. Trees shall not be planted within 2 feet of any permanent hard surface paving or walkway. Sidewalk cuts in concrete for trees, or tree wells, shall be at least 25 square feet; however, larger cuts are encouraged because they allow additional air and water into the root system and add to the health of the tree. Tree wells shall be covered by tree grates in accordance with City specifications.

7. Trees, as they grow, shall be pruned to provide at least 8 feet of clearance above sidewalks and 14 feet above street roadway surfaces.

8. Existing trees may be used as street trees if there will be no damage from the development which will kill or weaken the tree. Sidewalks of variable width and elevation may be utilized to save existing street trees, subject to approval by the Staff Advisor.

REPLACEMENT OF STREET TREES: Existing street trees removed by development projects shall be replaced by the developer with those from the approved street tree list. The replacement trees shall be of size and species similar to the trees that are approved by the Staff Advisor.

RECOMMENDED STREET TREES: Street trees shall conform to the street tree list approved by the Ashland Tree Commission.
**Placing Instructions**
Proper planting of street trees will help assure their survival and get them off to a good start.

1. **HOLE SIZE:** Each hole should be about twice the diameter of the container or root ball. In soils that have good structure, the planting hole need only be deep enough to hold the root ball. Plant “high” or “proud” in all but sandy soils. The sides and bottom of the hole should be roughened with a shovel to intermingle the backfill and local native soil and to provide easier access for developing roots.

2. **SOIL IMPROVEMENT:** For most street tree planting, a back fill soil mix composed of 25% humus or soil amendment and 75% tree pit soil is recommended. In heavier clay soils, amendments are not recommended.

3. **PLANTING:** Place the tree in the hole with the roots spread in a natural position. The tree should stand at about the same depth that it grew in the nursery. Work the backfill soil firmly around the roots, watering it, if necessary, to settle and fill pockets. Fill the hole leaving a saucer-like depression to retain water. Handle balled and burlapped (B&B) plants by the ball only. The burlap should be untied from the tree trunk and tucked well below the soil level, but not completely removed. Remove all strings and tags from the trunk and branches. Wire cages should be flattened or clipped only after tree is in hole.

4. **SELECTED PRUNING:** Pruning may be necessary. B&B trees have often been pre-pruned by the nursery at the time of digging. Prune only to keep the normal shape of the tree. Cut just above a bud or close to a twig, branch, or trunk. Try to form a well developed crown with a strong leader and wide-angled branches.

5. **FERTILIZER (OPTIONAL):** When the hole for the tree is about 2/3 backfilled, slow-release fertilizer tablets may be evenly distributed around the rootball. The tablets should have an analysis of 20-5-10 N-P-K or similar balance.

6. **STAKING:** In many cases staking of new trees is unnecessary. Staking is beneficial in areas of potential vandalism, high winds and/or wet soil. Trees should be double staked with 7’ long stakes having a minimum diameter of two inches. The stakes should extend four to five feet above the ground. Ties should be one inch canvas web belting or rubber, looped loosely around the trunk in a figure-eight pattern and nailed to the tree stakes. The tree should remain staked for no more than one year.

7. **WATERING:** Water new trees once a week for the first two summers and less often over the next two years. Deep waterings should be applied slowly within the area under the spread of the trees crown and just beyond. Short frequent waterings wet only the top few inches of soil and encourage roots to grow near the surface. Ask at your local nursery if you have questions about planting, pruning, feeding or watering your new trees.
<table>
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<td>Acer saccharum</td>
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<td>Acer truncatum</td>
<td>Purblebow Maple, Shantung Maple</td>
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<td>Amelanchier arborea</td>
<td>Hybrid Serviceberry</td>
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<td>Carpinus betulus var. ‘Fastigata’</td>
<td>European Hornbeam var. ‘Fastigata’</td>
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<td>Eastern Redbud</td>
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<td>Chitalpa tashkentensis</td>
<td>Pink Dawn, White Cloud</td>
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<td>Cladrastis lutea</td>
<td>Yellowood</td>
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<td>Kousa Dogwood</td>
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<td>‘Raywood’ Narrowleaf Ash</td>
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<td>Ginkgo biloba</td>
<td>Ginkgo/Maidenhair Tree</td>
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<td>Kentucky Coffee Tree</td>
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<td>Koelreuteria paniculata</td>
<td>Goldenrain Tree</td>
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<td>Lagerstroemia indica</td>
<td>Crapemyrtle</td>
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<td>Magnolia grandiflora</td>
<td>Southern Magnolia</td>
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</tr>
<tr>
<td>Magnolia kobus</td>
<td>Kobus Magnolia</td>
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(Continued on page 8)
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<th>Common Name</th>
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<tr>
<td>Malus spp.</td>
<td>Ornamental Crabapples</td>
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<tr>
<td>Nyssa sylvatica</td>
<td>Tupelo/Sourgum</td>
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<tr>
<td>Oxydendrum arboreum</td>
<td>Sourwood</td>
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<td>Parrotia persica</td>
<td>Persian Parrotia</td>
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<td>Pistache chinensis</td>
<td>Chinese Pistache</td>
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<tr>
<td>Prunus cerasifera vars.</td>
<td>Flowering Plum</td>
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<tr>
<td>Prunus sargentii</td>
<td>Sargent Cherry</td>
<td>55</td>
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<tr>
<td>Prunus serrulata vars.</td>
<td>Japanese Flowering Cherries</td>
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<td>Pyrus calleryana vars.</td>
<td>Callery Pear</td>
<td>57</td>
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<tr>
<td>Quercus chrysolepis</td>
<td>Canyon Live Oak</td>
<td>58</td>
</tr>
<tr>
<td>Quercus coccinea</td>
<td>Scarlet Oak</td>
<td>59</td>
</tr>
<tr>
<td>Quercus robur</td>
<td>English Oak</td>
<td>60</td>
</tr>
<tr>
<td>Quercus rubra</td>
<td>Red Oak</td>
<td>61</td>
</tr>
<tr>
<td>Quercus suber</td>
<td>Cork Oak</td>
<td>62</td>
</tr>
<tr>
<td>Sorbus aucuparia</td>
<td>European Mountain Ash</td>
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<td>Styrax japonicus</td>
<td>Japanese Snowbell</td>
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<td>Taxodium distichum</td>
<td>Baldcypress</td>
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<td>Tilia cordata</td>
<td>Littleleaf Linden</td>
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<tr>
<td>Ulmus parvifolia</td>
<td>Chinese Elm</td>
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</tr>
<tr>
<td>Zelkova serrata</td>
<td>Zelkova</td>
<td>68</td>
</tr>
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</table>
**Tree Shapes and Sizes to Suit the Site**

Consider the size and shape of trees for optimal placement in the landscape. The first consideration in selecting a tree is that the size and shape of the tree should suit the specific location in which it is planted. The following lists will help you select an appropriate tree for a particular circumstance.

**PYRAMIDAL**

Many trees that appear upright when young become pyramidal with age. As they mature, the lower branches get larger and begin to droop with weight. These lower branches should not interfere with vehicular or pedestrian traffic so pruning is sometimes needed. Although pruning may be required, some pyramidal trees nevertheless make good street trees. Medium to large pyramidal trees should not be planted under power lines.

**EXAMPLES OF TREES HAVING A PYRAMIDAL SHAPE**

<table>
<thead>
<tr>
<th>SMALL TO MEDIUM TREES</th>
<th>MEDIUM TO LARGE TREES</th>
</tr>
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<tbody>
<tr>
<td>Sourwood</td>
<td>Ginkgo</td>
</tr>
<tr>
<td>Kobus Magnolia</td>
<td>Evergreen Magnolia</td>
</tr>
<tr>
<td></td>
<td>Tupelo or Sour Gum</td>
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<tr>
<td></td>
<td>Littleleaf Linden</td>
</tr>
</tbody>
</table>

**ROUNDED TO SPREADING**

Small, round trees are preferred for some sites under utility lines while large, round trees are preferred for sites needing a dramatic impact on the streetscape. Many large, round trees have multiple tops which can be pruned to form a “V-shape” around powerlines as the trees mature. Wide-spreading trees require more thought before they are chosen as street trees. They either need to be placed further back from the street or need to be pruned with care to secure clearance over the roadway.

**EXAMPLES OF TREES HAVING A ROUNDED TO SPREADING SHAPE**

<table>
<thead>
<tr>
<th>SMALL TO MEDIUM TREES</th>
<th>MEDIUM TO LARGE TREES</th>
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</thead>
<tbody>
<tr>
<td>Hedge Maple</td>
<td>Norway Maple</td>
</tr>
<tr>
<td>Amur Maple</td>
<td>Flowering Ash</td>
</tr>
<tr>
<td>Eastern Redbud</td>
<td>Thornless Honeylocust</td>
</tr>
<tr>
<td>Crapemyrtle</td>
<td>Canyon Live Oak</td>
</tr>
<tr>
<td>Ornamental Crabapple</td>
<td>Scarlet Oak</td>
</tr>
<tr>
<td>Goldenrain Tree</td>
<td></td>
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<tr>
<td>Variegated Box Elder</td>
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</table>
OVAL
An upright oval shape is a good shape for a street tree, reaching up toward the sky without too much competition with vehicular traffic. Some oval-shaped trees reach to a lofty height with a single center trunk and are therefore unsuitable for planting underneath powerlines. Others having multiple leaders may be pruned to a ‘U-shape’ around powerlines.

EXAMPLES OF TREES HAVING AN OVAL SHAPE

<table>
<thead>
<tr>
<th>SMALL TO MEDIUM TREES</th>
<th>MEDIUM TO LARGE TREES</th>
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<tbody>
<tr>
<td>Trident Maple</td>
<td>Red Maple</td>
</tr>
<tr>
<td>Kousa Dogwood</td>
<td>Sugar Maple</td>
</tr>
<tr>
<td>American Hornbeam</td>
<td>American Ash</td>
</tr>
<tr>
<td>Washington Thorn</td>
<td>‘Raywood’ Ash</td>
</tr>
<tr>
<td>Paperbark Maple</td>
<td>Red Oak</td>
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<tr>
<td>Chinese Pistache</td>
<td></td>
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</tbody>
</table>

COLUMNAR
Columnar trees are frequently used because there is not room enough for other tree types. Narrow branch angles result from branches that grow up instead of out. Branches of this type are structurally less strong than wider angled branches. Columnar trees should not be planted directly under powerlines.

EXAMPLES OF TREES HAVING A COLUMNAR SHAPE

<table>
<thead>
<tr>
<th>SMALL TO MEDIUM TREES</th>
<th>MEDIUM TO LARGE TREES</th>
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<tbody>
<tr>
<td>Upright Goldenrain</td>
<td>Upright English Oak</td>
</tr>
<tr>
<td>Flowering Crabapple vars.</td>
<td>‘Armstrong’ Red Maple</td>
</tr>
<tr>
<td>Flowering Cherry vars.</td>
<td>‘Olmsted’ Norway Maple</td>
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<tr>
<td>Flowering Pear vars.</td>
<td>‘Columnar’ Sugar Maple</td>
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<tr>
<td></td>
<td>Columnar Norway Maple</td>
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<tr>
<td></td>
<td>Carpinus betula ‘Fastigiata’</td>
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</table>

VASE-SHAPED
A vase-shaped (or V-shaped) tree is a favored form because the branches arch to form a shady canopy over both streets and sidewalks while staying out of the way of traffic and powerlines. Note: Some of the trees listed below naturally develop an upright-oval shape. However, pruning the lower limbs gives a vase shaped form.

EXAMPLES OF TREES HAVING A VASE SHAPE

<table>
<thead>
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<th>SMALL TO MEDIUM TREES</th>
<th>MEDIUM TO LARGE TREES</th>
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<td>European Hornbeam</td>
<td>Sargent Cherry</td>
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<tr>
<td>‘Kwanzan’ Flowering Cherry</td>
<td>Chinese Elm</td>
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<tr>
<td>Eastern Redbud</td>
<td>Zelkova</td>
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<tr>
<td></td>
<td>American Yellowwood</td>
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<td></td>
<td>Kentucky Coffee Tree</td>
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<td></td>
<td>Persian Parrotia</td>
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<td></td>
<td>California Black Oak</td>
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### Trees for Urban Conditions

City trees must contend with tremendous biological, physical, and chemical stresses: too much water or too little; hot summer temperatures; polluted air, water and soil; physical damage from vehicles and vandalism. Listed below are species that the Tree Commission recommends for withstanding the stress of urban conditions in downtown locations.

<table>
<thead>
<tr>
<th>Red Maple</th>
<th>Hedge Maple</th>
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<tbody>
<tr>
<td>Norway Maple</td>
<td>Amur Maple</td>
</tr>
<tr>
<td>Ginkgo</td>
<td>Goldenrain Tree</td>
</tr>
<tr>
<td>Thornless Honeylocust</td>
<td>Red Oak</td>
</tr>
<tr>
<td>Littleleaf Linden</td>
<td>Flowering Pear</td>
</tr>
<tr>
<td>European Hornbeam</td>
<td>Kentucky Coffee Tree</td>
</tr>
<tr>
<td></td>
<td>'Raywood' Ash</td>
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### Drought Tolerant Trees

The following is a list of trees on the Recommended Street Tree List that are somewhat drought tolerant once they are well established in the landscape.

<table>
<thead>
<tr>
<th>Trident Maple</th>
<th>Norway Maple</th>
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<tbody>
<tr>
<td>Hedge Maple</td>
<td>'Green Mountain' Sugar Maple</td>
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<tr>
<td>Amur Maple</td>
<td>'Autumn Purple' Ash</td>
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<tr>
<td>Washington Thorn</td>
<td>Flowering Ash</td>
</tr>
<tr>
<td>'Raywood' Ash</td>
<td>'Rosehill' Ash</td>
</tr>
<tr>
<td>Goldenrain Tree</td>
<td>Chinese Pistache</td>
</tr>
<tr>
<td>Crapemyrtle</td>
<td>Canyon Live Oak</td>
</tr>
<tr>
<td>Flowering Crabapple</td>
<td>Chinese Elm</td>
</tr>
<tr>
<td>Flowering Pear</td>
<td>Zelkova</td>
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<tr>
<td>Littleleaf Linden</td>
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</tbody>
</table>

### Solar Friendly Trees

These trees allow the maximum amount of solar radiation during the late autumn, winter and early spring.

<table>
<thead>
<tr>
<th>Trident Maple</th>
<th>Amur Maple variety ‘Flame’</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Ash</td>
<td>Crapemyrtle</td>
</tr>
<tr>
<td>Flowering Ash</td>
<td>Zelkova</td>
</tr>
<tr>
<td>Paperbark Maple</td>
<td>Eastern Redbud</td>
</tr>
<tr>
<td>‘Autumn Flame’ Red Maple</td>
<td>American Hornbeam</td>
</tr>
<tr>
<td>‘Crimson King’ Norway Maple</td>
<td>‘October Glory’ Red Maple</td>
</tr>
<tr>
<td>‘Schlesinger’ Red Maple</td>
<td>‘Green Mountain’ Sugar Maple</td>
</tr>
<tr>
<td>‘Legacy’ Sugar Maple</td>
<td>Sargent Cherry</td>
</tr>
<tr>
<td>Honeylocust</td>
<td>'Raywood' Ash</td>
</tr>
<tr>
<td>Sour gum</td>
<td>Ginkgo</td>
</tr>
<tr>
<td>Sourwood</td>
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</tr>
</tbody>
</table>
**Trees with Seasonal Interest**

**BROADLEAF EVERGREEN TREES**
- Southern Magnolia
- Canyon Live Oak

**TREES WITH CONSPICUOUS FLOWERS**
- Eastern Redbud
- Flowering Pears
- Kousa Dogwood
- Flowering Plums
- Flowering Ash
- Flowering Cherries
- Washington Hawthorne
- American Yellowwood
- Goldenrain Tree
- Southern Magnolia
- Crapemyrtle
- Chitalpa ‘Pink Dawn’, ‘White Cloud’
- Flowering Crabapples

**TREES THAT USUALLY HAVE GOOD AUTUMN COLOR**
(R - Red, Y - Yellow, O - Orange, P - Purple)

<table>
<thead>
<tr>
<th>Tree</th>
<th>Color</th>
<th>Tree</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trident Maple</td>
<td>RYO</td>
<td>‘Rosehill’ Ash</td>
<td>YP</td>
</tr>
<tr>
<td>Washington Hawthorn</td>
<td>Y</td>
<td>‘Sunburst’ Honeylocust</td>
<td>Y</td>
</tr>
<tr>
<td>Hedge Maple</td>
<td>Y</td>
<td>Ginkgo</td>
<td>Y</td>
</tr>
<tr>
<td>Amur Maple</td>
<td>RO</td>
<td>Chinese Pistache</td>
<td>RYP</td>
</tr>
<tr>
<td>Norway Maple</td>
<td>Y</td>
<td>Sargent Cherry</td>
<td>O</td>
</tr>
<tr>
<td>Eastern Redbud</td>
<td>Y</td>
<td>Scarlet Oak</td>
<td>RP</td>
</tr>
<tr>
<td>Kousa Dogwood</td>
<td>YO</td>
<td>Red Oak</td>
<td>RY</td>
</tr>
<tr>
<td>‘Flame’ Ash</td>
<td>P</td>
<td>Baldcypress</td>
<td>O</td>
</tr>
<tr>
<td>‘Raywood’ Ash</td>
<td>P</td>
<td>Paperbark maple</td>
<td>R</td>
</tr>
<tr>
<td>Crapemyrtle</td>
<td>RY</td>
<td>Chinese Elm</td>
<td>Y</td>
</tr>
<tr>
<td>Flowering Pear</td>
<td>RY</td>
<td>American Hornbeam</td>
<td>YO</td>
</tr>
<tr>
<td>Red Maple</td>
<td>RY</td>
<td>Tupelo</td>
<td>YO</td>
</tr>
<tr>
<td>Sugar Maple</td>
<td>RO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Autumn Purple’ Ash</td>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sourwood</td>
<td>OR</td>
<td></td>
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</tbody>
</table>
**Trees And Powerlines**

Many power outages are caused by trees. The City performs line clearance where tree limbs are in close proximity to live wires. You may assist the utility workers and the community by planting trees that cause the least interference with wires. One solution is to plant smaller trees that top out at or below the height of the lowest live electrical wire. These live wires are 18 feet or more above the ground. Another solution is to plant trees that naturally fork into a multi-trunked form. These trees may be easily pruned and shaped away from overhead wires. Avoid planting large, single trunked or pyramidal shaped trees directly under power lines. Select more appropriate trees by using this list.

**SMALL STATURE TREES THAT USUALLY REMAIN BELOW POWER LINES:**
- Trident Maple
- Kousa Dogwood
- American Hornbeam
- Washington Thorn
- Sourwood
- Hedge Maple
- Amur Maple
- Eastern Redbud
- Goldenrain Tree
- Crapemyrtle
- Flowering Crabapple
- Hybrid Serviceberry
- Flowering Cherry
- Flowering Plum

**LARGER STATURE TREES WITH MULTILIMB STRUCTURE:**
- Norway Maple
- Red Maple
- Sugar Maple
- European Hornbeam
- American Ash
- Flowering Ash
- ‘Raywood’ Ash
- Thornless Honeylocust
- Chinese Pistache
- California Black Oak
- Red Oak
- Chinese Elm
- Zelkova
- Persian Parrotia
- Chitalpa ‘Pink Dawn’, ‘White Cloud’

**Parking Lot Trees**

Parking lots provide some of the most challenging locations in which to grow trees. The following species perform better than most in these inhospitable situations. Consult the ‘Site Design and Use Standards’ for details as to the provision of adequate root room and protection from vehicles.

- Red Oak
- Canyon Live Oak
- Amur Maple
- Norway Maple
- Red Maple
- Hedge Maple
- Sargent Cherry
- Ornamental Pear
- Zelkova
- Goldenrain Tree
- Chinese Pistache
- ‘Flame’ Ash
- ‘Raywood’ Ash
- American Ash
- European Hornbeam
- Thornless Honeylocust
- ‘Kwanzan’ Flowering Cherry
- Crapemyrtle
**Lithia Way Recommended Street Trees**

Japanese Zelkova ‘Makino’ (Zelkova serrata) — Upright variety, vase shaped in youth. Yellow, orangish brown, to reddish fall color. Drought, heat, wind, and urban condition tolerant.

Littleleaf Linden ‘Corinthian’ (Tilia cordata) — Compact pyramidal in youth, more rounded with age. Lacy cluster of fragrant cream flowers. Poor soil, drought and air pollution tolerant.

Trident Maple (Acer buergerianum) — Up-right rounded crown. New growth often bronze to purple; yellow, orange, red fall color. Drought, wind, soil compaction, and air pollution tolerant.

Bigtooth Maple ‘Schmidt’ (Acer grandidentatum) — Upright oval to rounded – dense foliage. Orange, red or yellow fall color. Moderate drought tolerance.
MINIMUM PARKROW TREE REQUIREMENTS

4 Foot Parkrow
Amur Maple (Acer ginnala)
Serviceberry (Amelanchier arborea)
Upright European Hornbeam (Carpinus betulus var. ‘Fastigata’)
Eastern Redbud (Cercis canadensis)
Kousa Dogwood (Cornus kousa)
Paul’s Scarlet Hawthorn (Crataegus laevigata)
Washington Thorn (Crataegus phaenopyrum)
Goldenrain (Koelreuteria paniculata)
Crapemyrtle (Lagerstroemia indica)
Kobus Magnolia (Magnolia kobus)
Ornamental Flowering Crabapples (Malus spp.)
Sourwood (Oxydenrum arboreum)
Japanese Snowbell (Styrax japonicus)

5 Foot Parkrow
Bigtooth Maple (Acer grandidentatum)
Trident Maple (Acer buergeranum)
Paperbark Maple (Acer griseum)
Hedge Maple (Acer campestre)
American Hornbeam (Carpinus caroliniana)
Raywood Ash (Fraxinus oxycarpa)
Persian Parrotia (Parrotia persica)
Chinese Pistache (Pistache chinensis)
Flowering Cherries and Plums (Prunus spp.)
Flowering Pears (Pyrus calleryana)
European Mountain Ash (Sorbus aucuparia)
6 Foot Parkrow
‘Armstrong’ Maple (Acer freemanii)
Yellowwood (Cladrastis lutea)
Flowering Ash (Fraxinus ornus)
Summit Ash (Fraxinus pennsylvanica ‘Summit’)
Ginkgo (Ginkgo biloba)
Honeylocust (Gleditsia triacanthos inermis)
Kentucky Coffeetree (Gymnocladus dioicus)
Tupelo (Nyssa sylvatica)
Scarlet Oak (Quercus coccinea)
Canyon Live Oak (Quercus chrysolepis)
English Oak (Quercus robur)
Northern Red Oak (Quercus rubra)
Zelkova (Zelkova serrata)

7 Foot Parkrow and 8 Foot Parklow
Bald Cypress (Taxodium distichum)
Red Maple (Acer rubrum vars.)
Sugar Maple (Acer saccharinum)
Southern Magnolia (Magnolia grandiflora)
Oaks (Quercus spp.)
Idaho Locust (Robinia pseudoacacia idahoensis)
Littleleaf Linden (Tilia cordata)
Chinese Elm (Ulmus parvifolia)
Norway Maple (Acer platanoides)
American Ash (Fraxinus americana)
**TRIDENT MAPLE**

*Acer buergerianum*

**Size & Rate of Growth**
25 to 35 feet in height with a 20 to 30 foot spread. Moderately slow growth initially, becoming slower growing as it ages.

**Ornamental Features**
Attractive, oval-rounded form. Thick, shiny leaves. Good autumn color.

**Use**
Suitable for planting under power lines. Has been extensively used as street tree in Japan.

**Culture**
Full sun. Well-drained soil. Fairly tolerant of urban conditions.

**Drought Tolerance**
Somewhat drought tolerant once established.

**Pruning**
Some pruning may be necessary to establish good structure.

**Insects & Diseases**
None noted.

**Maintenance Issues**
Some pruning. Root system less invasive than larger maples. Fewer problems with sidewalk lifting.

**Native Range**
China and Japan.

**Varieties & Cultivars**
Numerous varieties and cultivars are in existence but difficult to obtain.

**Specimen Location**
Upper duck pond turnaround near street, Lithia Park.

**Notes**
May be somewhat difficult to obtain.

---

**Leaf Type**
- simple untoothed
- simple toothed
- simple lobed
- compound
- needle-like
- scale-like

**Fruit Type**
- balls & capsules
- cone
- winged
- pod
- nut
- acorn
- fleshy
- berry

**Drought Tolerance**
- good/very good
- moderate
- poor/fair

**Exposure**
- full sun
- partial shade

---

**Height**
Shown in relationship to a telephone pole. Specific heights are listed in the SIZE AND RATE OF GROWTH category for each plant. Tree shape is generalized.
TRIDENT MAPLE
Acer buergerianum

Size & Rate of Growth
25 to 35 feet in height with a 20 to 30 foot spread. Moderate growth initially, becoming slower growing as it ages.

Ornamental Features
An attractive, oval, rounded form. Thick, shiny leaves. Good autumn color.

Use
Suitable for planting under power lines. Has been extensively used as street tree in Japan.

Culture
Full sun. Well drained soil. Fairly tolerant of urban conditions.

Drought Tolerance
Somewhat drought tolerant once established.

Pruning
Some pruning may be necessary to establish good structure.

Insects & Diseases
None noted.

Maintenance Issues
See pruning. Root system less invasive than larger maples. Fewer problems with sidewalk lifting.

Native Range
China and Japan.

Varieties & Cultivars
Numerous varieties and cultivars are in existence but difficult to obtain.

Specimen Location
Upper duck pond turnaround near street, Lithia Park.

Notes
May be somewhat difficult to obtain.
**HEDGE MAPLE**

*Acer campestre*

**Size & Rate of Growth**
30 to 40 feet in height with a spread of 30 to 35 feet. Moderate growth rate.

**Ornamental Features**
Rounded and dense. Leaves appear healthy throughout summer and early fall. Yellow autumn color.

**Use**
A good choice for planting under utility wires. One of the most adaptable small trees.

**Culture**
Full sun or light shade. Easily transplanted. pH adaptable. Air pollution tolerant.

**Drought Tolerance**
Tolerant of dry soils and compaction.

**Pruning**
Will tolerate severe pruning. Good compartmentalization of wounds. Pruning in winter or spring results in loss of sap. This should be avoided.

**Insects & Diseases**
Less subject to insects than many maple species.

**Maintenance Issues**
Pruning required to keep branches well above roadways.

**Native Range**
Europe, Near East, North Africa.

**Varieties & Cultivars**
Numerous varieties recognized. ‘Postelense’ is a shrub form with leaves that are golden yellow when young. ‘Evelyn’ has improved branch angles for street tree planting.

**Specimen Location**
Near bleachers of SOU ball fields on Iowa Street.
‘ARMSTRONG’, ‘AUTUMN BLAZE’ MAPLE
Acer x freemanii vars

Size & Rate of Growth
35 to 50 feet tall and variable spread. Moderate to rapid growth.

Ornamental Features
Hybrid between Red and Silver Maple. Combines the drought tolerance of the Silver Maple with the fall color and superior branching habit of the Red Maple.

Use
Root system is adapted to urban conditions.

Culture
Prefers full sun but will adapt to partial shade.

Drought Tolerance
Moderate. Requires summer water.

Pruning
Requires pruning to develop strong structure.

Insects & Diseases
Cottony scale.

Maintenance Issues
Strong root systems may heave sidewalks.

Native Range
Hybrid.

Varieties & Cultivars
‘Armstrong’ has an upright columnar habit. ‘Autumn Blaze’ is broadly oval. Both have outstanding orange-red fall foliage.

Specimen Locations
‘Armstrong’ Lithia Park shop area, between nursery and greenhouse.
AMUR MAPLE

*Acer ginnala*

**Size & Rate of Growth**
15 to 20 feet tall with an equal spread; moderate growth.

**Ornamental Features**
Dense shrub or small multi-stemmed tree with a rounded crown. Glossy green leaves have three small lobes. Fall color will vary depending on plant. Small yellow flowers are fragrant in early spring; followed by red winged seeds.

**Use**
Small specimen. Suitable for planting under wires.

**Culture**
Needs full sun to exhibit best fall color but will tolerate light shade. Adaptable to a wide range of soil conditions. Easily transplanted.

**Drought Tolerance**
Very good.

**Pruning**
Tolerates heavy pruning. May require pruning to maintain single-stemmed habit. Nurseries are growing single trunk specimens for street tree use.

**Insects & Diseases**
None serious.

**Maintenance Issues**
See pruning.

**Native Range**
China, Mongolia, Korea, Japan.

**Varieties & Cultivars**
*Acer ginnala var. semenowii* - a shrubbier type which does well as a screen or barrier. Lustrous, dark green leaves turn red-purple in fall. ‘Flame’- consistently good autumn color.

**Specimen Location**
In front of 199 East Main.
BIGTOOTH MAPLE

Acer grandidentatum

Size & Rate of Growth
20 to 30 feet; slow to moderate growth rate.

Ornamental Features
Good autumn color.

Use
As a small street tree. Good branch structure for arching over sidewalks and roadways.

Culture
Full sun to part-shade. Needs good drainage. Adaptable to many soil types.

Drought Tolerance
Drought tolerant once established.

Pruning
Minimal pruning needed.

Insects & Diseases
Occasional leaf spot. Not seriously damaging. Possible sun scald on South and West sides of young trees if in sufficiently irrigated during establishment.

Maintenance Issues
None.

Native Range
South Idaho to Mexico. Most common is North Utah.

Varieties and Cultivars
‘Rocky Mt. Glow’ selected for good orange-red autumn color.

Specimen Location
Species on the East side of the Second Street parking lot. Var. Rocky Glow: through the downtown area on Main Street.

Note
A smaller, western version of the Eastern Sugar maple.
PAPERBARK MAPLE

Acer griseum

Size & Rate of Growth
20 to 30 feet in height with a 10 to 20 foot spread.

Ornamental Features
Upright oval or rounded form. Small trifoliate leaves turn red in autumn. Extremely attractive, peeling, reddish-brown bark.

Use
Small street tree.

Culture
Full sun. Prefers well drained, moist soil but performs well in clay soils also.

Drought Tolerance
Moderate. Does not tolerate extended drought especially in poor soil.

Pruning
Often needs pruning to encourage a central leader for street tree use.

Insects & Diseases
Possible sun scald damage to young trees if not consistently irrigated.

Maintenance Issues
See pruning.

Native Range
China.

Specimen Location
Within planter beds on E. Main and Pioneer St. and E. Main and 1st St. downtown.
**NORWAY MAPLE**

*Acer platanoides*

**Size & Rate of Growth**
Normally 40 to 50 feet tall, with a spread 2/3 of, or equal to, its height; moderate growth.

**Ornamental Features**
Large tree with dense, rounded crown. Leaves are four to seven inches wide. Individual flowers are small but form showy clusters. Purple foliaged varieties may be used as accents along the streetscape. Should be used cautiously due to aggressive surface root habit and frequent aphid infestations.

**Use**
Large street tree.

**Culture**
Prefers full sun. Tolerant of wide range of soil types and urban conditions.

**Drought Tolerance**
Moderate.

**Pruning**
Needs little pruning, except to keep lower branches clear of street right-of-way.

**Insects & Diseases**
Aphid infestations, especially in the spring, and verticillium wilt.

**Maintenance Issues**
This tree has dense surface rooting. Aphid infestations produce honeydew which can drip onto cars and sidewalks. May be suitable in the proper location. Other trees should be considered. Varieties are better suited than the species. Produces abundant seedlings – nuisance.

**Native Range**
Europe, northern Turkey, northern Iran.

**Varieties & Cultivars**
‘Columnare’ - smaller foliage, slower growing with narrow outline. ‘Crimson King’ - slower growing and maintains purple foliage throughout the growing season. ‘Emerald Queen’ - glossy dark green foliage, upright-oval outline. ‘Schwedleri’ - wide spreading with purplish-red spring foliage, turning dark green in summer.

**Specimen Location**
Species - in front of the High School at 885 Siskiyou.
‘Crimson King’ - Helman School playground.
RED MAPLE

Acer rubrum

Size & Rate of Growth
40 to 60 feet tall in cultivation with a variable spread; height may reach 120 feet in the wild; moderate to fast growth.

Ornamental Features
Upright oval habit develops with age. Red dominates the features of this tree. Twigs have a reddish cast. Buds are red, as are the emerging leaves. Fall color is variable from tree to tree, but is generally a rich scarlet color. Flowers on female trees are showy for maples - appearing red in March before the leaves emerge. Winged fruit is often red, maturing to brown.

Use
Root system is adapted to urban conditions.

Culture
Prefers full sun but will adapt to partial shade. Tolerates a variety of soil conditions, including wet soils.

Drought Tolerance
Poor to moderate. Requires summer water.

Pruning
Corrective pruning needed to remove narrow branch angles.

Insects & Diseases
Cottony Scale.

Maintenance Issues
Strong root system may heave sidewalks.

Native Range
Eastern and central United States.

Varieties & Cultivars
‘Columnare’. ‘October Glory’ - shiny leaves which show intense orange to red fall color. ‘Red Sunset’ - pyramidal to rounded outline. Brilliant orange to red fall color. 30 - 35’.

Specimen Location
‘October Glory’ - south of upper duck pond in Lithia Park.
‘Red Sunset’ - hillside west of tennis courts, Lithia park.
‘Autumn Blaze’ - intersection of Pioneer and Granite streets. Lithia Park.
SUGAR MAPLE

Acer saccharum

Size & Rate Of Growth
50 to 80 feet in height with a spread of from 30 to 50 feet. Slow to moderate growth rate.

Ornamental Features
Beautiful irregular oval form and excellent orange autumn color.

Use
A good street tree if given enough root room and protected from hot exposures.

Culture
Full sun to light shade. Moist well drained soil is best. Not suitable for highly urban conditions.

Drought Tolerance
Has some drought tolerance once established.

Pruning
Not usually required.

Insects & Diseases
Occasional aphid problems.

Maintenance Issues
Best if watered during summer. Strong roots may raise sidewalks.

Native Range
Eastern U.S.

Varieties & Cultivars
Several varieties have better heat and drought tolerance than the species. ‘Green Mountain’ is noted for good form, leaf scorch resistance. ‘Bonfire’ has excellent orange-red autumn color.

Specimen Location
‘Green Mountain’ - Lithia Park entrance between street and sidewalk.
**PURPLEBLOW MAPLE, SHANTUNG MAPLE**

*Acer truncatum*

**Size & Rate of Growth**
Small, rounded, broad crown with regular branching. Slow growth rate, reaching 20’ in height and spread.

**Ornamental Features**
Upon emerging, leaves are reddish-purple, changing to dark green leaves, glossy green on upper side and paler beneath. Fall color an excellent yellow-orange-red.

**Use**
The features of this tough maple make it an ideal candidate for urban settings and residential settings.

**Culture**
Adaptable to varied soils: prefers a well-drained site.

**Drought Tolerance**
Extremely drought tolerant. Full sun provides for best landscape development.

**Insects & Diseases**
None noted.

**Maintenance Issues**
Relatively problem free, based on limited data. Heavy fruiting suggests self sowing/volunteers within the landscape.

**Native Range**
Native to Northern China, Manchuria and Korea.

**Varieties & Cultivars**
‘Akikaze Nishiki’-variegated leaves
‘Fire Dragon’-bright fall color
Cultivar ‘Keithsform’ is a hybrid between Acer truncatum and Acer plantanoides (Norway Maple) Subsp. Mono-known as the Painted Maple, similar to Acer truncatum but more refined foliage, and form is vase-shaped with a dome canopy. Has more ornamental bark.

**Specimen Location**
Lithia Park Entrance prior to bridge, Calle Guanajuato planting strip parallel to Ashland Creek.
HYBRID SERVICEBERRY
Amelanchier x grandiflora

**Size & Rate of Growth**
15 to 25’ tall with a variable spread. Slow to moderate growth.

**Ornamental Features**
Rounded multi-trunk, upright vase habit. Open to moderate density. White flower clusters in spring.

**Use**
A good street tree well adapted to planting beneath power lines.

**Culture**
Partial shade to full sun.

**Drought Tolerance**
Moderate drought tolerance. Good drainage is essential.

**Pruning**
Requires little pruning to develop strong structure.

**Insects & Diseases**
Susceptible to rust, fire blight and various insects.

**Maintenance Issues**
Basal suckers may require annual removal.

**Native Range**
Eastern U.S.

**Varieties & Cultivars**
There are many cultivars which are superior to the original cross.

**Specimen Location**
Upper duck pond turnaround.
EUROPEAN HORNBEAM
Carpinus betulus

Size & Rate of Growth
40 to 60 feet tall with a 30 to 40 foot spread; moderate growth.

Ornamental Features
Young tree pyramidal, becoming rounded at maturity. Oval leaves dark green in summer, often turning yellow in late fall. Flowers are borne in clusters, each with a conspicuous three-lobed bract. The nut is borne at the base of the flower bract.

Use
Street tree. Upright form (see Fastigiata below) keeps branches away from street and sidewalks.

Culture
Prefers full sun but can tolerate light shade. Tolerates a wide variety of soil conditions but does best on well-drained sites. Tolerates the urban environment. Best if transplanted when young.

Drought Tolerance
Moderate.

Pruning
Withstands heavy pruning. Standard form would require pruning for street tree use.

Insects & Diseases
None serious.

Maintenance Issues
See pruning.

Native Range
Europe to Iran.

Varieties & Cultivars
‘Fastigiata’ - multi-stemmed form which is upright in habit. Narrow in youth, the tree forms a dense pyramid as it matures. This is the most common form found in nurseries.

Specimen Location
Water Street parking lot. More mature specimens located in landscaped area southeast of library. ‘Fastigiata’ - west side of SOU computer building adjacent to parking lot.
AMERICAN HORNBEAM
*Carpinus caroliniana*

**Size & Rate of Growth**
20 to 30 feet in height with a 20 foot spread. Slow rate of growth.

**Ornamental Features**
Rounded to oval upright multi-trunk form. Good, soft yellow to yellow-orange autumn color. Interesting 'muscular' trunk form.

**Use**
As a small street tree where shade and/or a high water table are factors.

**Culture**
Moist soil. Partial shade.

**Drought Tolerance**
Low.

**Pruning**
Some pruning necessary for street and sidewalk clearance.

**Insects & Diseases**
None noted.

**Maintenance Issues**
See pruning.

**Native Range**
Eastern U.S.

**Varieties & Cultivars**
Small specimen south of the upper duck pond, Lithia Park. 135 Oak St. on corner of Oak and Lithia Way.
RECOMMENDED STREET TREES
Prepared by the Ashland Tree Commission

**JAPANESE HORNBEAM**
*Carpinus japonica*

**Size and Rate of Growth**
20 to 30 feet tall with an equal spread; slow growth rate

**Ornamental Features**
It is noted for its graceful form, attractive foliage and ornamental fruiting catkins, lush dark green leaves with prominent veining. Handsome small tree with rounded shape and densely branched; birch-like evergreen leaves; leaf density is moderate, allowing speckles of sunlight through canopies on sometimes cloudy Pacific Northwest days. The fruit are light green then brown-ish, seed-bearing, pendant-like, leafy bracted racemes approximately 2 inches (similar in appearance to hops).

**Use**
A small specimen that is suitable for planting under wires. Japanese Hornbeams like to branch low upon early growth, and nurseries must put some effort into developing a crown that begins above the pedestrian flow; therefore, if planting near a walkway or driveway, specify that the nursery choose a specimen with limbs on the trunk that begins no lower than 5’ or 6’. An attractively shaped, low-maintenance understory tree for shady sites. May be grown in lawns or naturalized in woodland areas.

**Culture**
Japanese Hornbeam prefers partial shade but can tolerate full sun, in order to grow densely. Prefers moist well drained soil but tolerates a range of soil types, prefers organically rich soil. Transplants easily from containers.

**Drought Tolerance**
Moderately drought tolerant once established, quite wind tolerant.

**Pruning**
Accepts repeated pruning, quickly healing scars. Prune back to the first pair of leaves on new shoots. The best times for minor pruning are early spring and after flowering. Major developmental pruning should be done in late winter, before bud burst.

**Insects and Diseases**
Pests: Relatively few insects attack hornbeam. Maple phenacoccus forms white cottony masses on the undersides of the leaves. Diseases: None are normally very serious. Several fungi cause leaf spots on Carpinus. Leaf spots are not serious so control measures are usually not needed. Canker, caused by several fungi, causes infected branches to dieback and entire trees die if the trunk is infected and girdled.

**Maintenance Issues**
See pruning.

**Native Range**
Japan
**EASTERN REDBUD**
*Cercis canadensis*

**Size & Rate of Growth**
20 to 30 feet tall with equal spread: moderate growth.

**Ornamental Features**
Often multi-stemmed but can be trained as a single-stemmed tree. Wide-spreading to rounded crown. Alternately arranged foliage is broad and heart-shaped at the base. Fall foliage color can be bright yellow. Flowers emerge before the foliage as clusters of rose colored blossoms borne directly on stems and the trunk. This tree often begins to flower at four to six years old. Fruits are brown pods two to three inches long.

**Use**
Street tree when trained to a single-stemmed habit. Container; parking lot island; buffer strip, small shade tree specimen; street tree.

**Culture**
Grows in full sun or light shade. Has the best development on moist, well-drained sites. Adaptable to acidic or alkaline soils. Benefits from some afternoon shade where hot.

**Drought Tolerance**
Low. Water in summer dry spells.

**Pruning**
May require pruning to establish single-stemmed habit. Regular pruning in the first few years improves form.

**Insects & Diseases**
Canker, leaf spot, and verticillium wilt. Usually not significant in this area.

**Maintenance Issues**
Trunks need some protection from mechanical damage.

**Native Range**
Eastern United States. Missouri to New Jersey south to Mexico and Florida.

**Varieties & Cultivars**
‘Alba’ - a slower growing white flowering form. Exquisite in fall bloom. ‘Forest Pansy’ - attractive purple red leaves in the spring fading to green in the summer. ‘Oklahoma’ - prolific bloomer and drought tolerant.

Western Redbud *Cercis occidentalis*. Habit is more often a shrub or small tree. Bright purplish-pink flowers in spring for three weeks. Much more drought tolerant than Eastern Redbud. Water well the first and second year to promote establishment; little will be required after that period. Native to California. Difficult to transplant.

**Specimen Location**
235 Hillcrest.
‘PINK DAWN’ AND ‘WHITE CLOUD’

*Chitalpa tashkentensis*

**Size and Rate of Growth**
20-30’ in height with equal spread. Fast growing, three feet per year in favorable conditions.

**Ornamental Features**
Flowers late spring until late fall. New blooms everyday in summer. Semi-open breezy structure. Leaves lanceolate, grey/green about 4 – 5” long and 1” wide.

**Use**
An attractive street tree, size permits planting under overhead utilities.

**Culture**
Partial to full sun. Prefers well drained, alkaline soil.

**Drought Tolerance**
Somewhat drought tolerant once established with irrigation in the first few years.

**Pruning**
May require initial pruning to promote healthy structure.

**Insects & Disease**
Powdery mildew may occur with warm, wet spring. May be susceptible to anthracnose, aphids, and verticillium.

**Maintenance Issues**
None known.

**Native Range**
Intergenera cross of southern Catalpa (Catalpa bignonoides) and Desert Willow (Chilopsis linearis) Originally from USSR, adapted to southwestern US.

**Varieties & Cultivars**
Clone #1 “Pink Dawn” most common. Clone #2 “Morning Cloud” more pale pink to white flowers, more fastigate form & slightly larger size.

**Specimen Location**
None locally.

**Notes**
Wood strength listed as medium weak. Attractive to honeybees and hummingbirds.
YELLOWWOOD

*Cladrastus lutea*

**Size & Rate of Growth**
30 to 50 feet in height with a 40 to 50 foot spread. Slow growing when young, becoming moderate.

**Ornamental Features**
Broad, rounded crown. Fragrant, white, wisteria-like blossoms in early summer. Yellow autumn color.

**Use**
As a street tree under appropriate conditions. Should be set well back from street to accommodate branching pattern and some litter problem.

**Culture**
Full sun. Moist, well-drained soil.

**Drought Tolerance**
Somewhat drought tolerant once established.

**Pruning**
Prune when young to shorten lateral branches. Prune only in summer and fall. Prune to avoid poor branch unions. Should be pruned up for street tree use.

**Insects & Diseases**
None noted.

**Maintenance Issues**
See pruning.

**Native Range**
Eastern U.S.

**Varieties & Cultivars**
May be somewhat difficult to obtain.

**Specimen Location**
Small specimen on northeast side of Glenwood Park.
KOUSA DOGWOOD

*Comus kousa*

**Size & Rate of Growth**
20 to 25 feet tall with variable spread; slow to moderate growth.

**Ornamental Features**
A multi-stemmed shrub or small tree, becoming rounded with maturity. Bark exfoliates with age, revealing a mosaic of gray, tan and brown. Leaves are dark green with deep venation. Flowers appear later than other flowering dogwoods. The flower bracts are creamy white, slender and pointed. The blossoms can last three weeks and may turn pinkish before falling. Fruit ripens in September and October and is reddish pink, resembling a raspberry. The fruit is edible, although mealy in texture.

**Use**
As a street tree where location isn't too exposed to hot sun. Suitable for planting under power lines.

**Culture**
Prefers light shade but will grow in full sun. Does best in acidic, well drained, consistently moist soil. Sometimes difficult to establish.

**Drought Tolerance**
Low to moderate. More drought tolerant than the Eastern Flowering Dogwood.

**Pruning**
May require pruning to establish single-stemmed habit.

**Insects & Diseases**
Less susceptible to Dogwood anthracnose than Pacific Dogwood or Eastern Flowering Dogwood.

**Maintenance Issues**
Pruning necessary for street and sidewalk clearance.

**Native Range**
Japan, Korea.

**Varieties & Cultivars**
*C. kousa var. chinensis* - slightly larger flower bracts. 'Milky Way' - a broad, bushy form which blooms profusely.

**Specimen Location**
Lithia Park across Winburn Way from Perozzi fountain.
PAUL’S SCARLET HAWTHORN
Crataegus laevigata var. Paul’s Scarlet

**Size & Rate of Growth**
15 to 25 feet tall with a 15 to 20 foot spread. Moderate to rapid growth.

**Ornamental Features**
Oval irregular silhouette with fine texture. Double scarlet flowers. Deep red fruit is generally sparse.

**Use**
Good street tree

**Culture**
Tolerates most soils but prefers heavy dry loam. Grows best in full sun.

**Drought Tolerance**
Drought tolerant when established.

**Pruning**
Needs pruning to establish uniform habit and a single trunk. Suckers profusely.

**Insects & Diseases**
Susceptible to fire blight.

**Maintenance Issues**
Presence of thorns makes pruning an unpleasant task.

**Native Range**
Parent species is native to Europe and North Africa.

**Specimen Location**
460 B St.
WASHINGTON THORN
Crataegus phaenopyrum

Size & Rate of Growth
25 to 30 feet. broadly oval to rounded habit.

Ornamental Features
Two-to three-inch leaves with three to five pointed lobes emerge reddish-purple, turning to dark green in the summer. Fall color usually in shades of orange to red. White flower clusters appear in June. Bright red fruits emerge in the fall and persist until mid-March.

Use
Street tree; suitable for planting under power lines.

Culture
Prefers full sun in a well-drained soil. Tolerates slightly acidic to alkaline soils. Because it develops a taproot, transplanting is most successful when plant is young.

Drought Tolerance
Very good.

Pruning
Some structural pruning may be necessary. Prune when dormant.

Insects & Diseases
Hawthorns are generally susceptible to many insect and disease problems. This particular species has shown more resistance to fire blight than other hawthorns.

Maintenance Issues
Slim, straight one-to three-inch thorns make this plant difficult to handle and it should not be used in high traffic areas. Thorny branches should be pruned above the height of small children.

Native Range
Eastern and central United States.

Varieties & Cultivars
‘Fastigiata’ - narrow, columnar form.

Specimen Location
North side upper duck pond, Lithia Park.
Corner of Euclid and Altamont.
AMERICANASH
Fraxinus americana

Size & Rate of Growth
50 to 65 feet in height with a spread of from 40 to 50 feet. Moderate to rapid growth rate.

Ornamental Features
Good oval shape. Usually good autumn color. Hue depends on variety. Colors early.

Use
A large stature street tree. Needs root room.

Culture
Full sun. Moist well drained soil best.

Drought Tolerance
Can tolerate some drought once established.

Pruning
May need some pruning to correct weak branch angles. Should be pruned in the fall.

Insects & Diseases
Many insects and diseases in native range. Less of a problem in the West.

Maintenance Issues
Strong lateral root system may heave sidewalks.

Native Range
Eastern U.S.

Varieties & Cultivars
‘Autumn Purple’ (seedless) - excellent autumn color. ‘Rosehill’ - dark green summer foliage, bronze-red fall color. ‘Cimmaron’ (seedless) - more upright than other varieties. Excellent autumn color.

Specimen Location
‘Autumn Purple’ - YMCA Park between parking lot and Tolman Creek Road.
FLOWERING ASH
*Fraxinus ornus*

**Size & Rate of Growth**
40 to 60 feet in height with an equal spread. Moderate growth rate. Slower than many ashes.

**Ornamental Features**
Fragrant, showy, creamy white flowers in May; thick glossy, bright green foliage; soft yellow to purple fall color. Rounded to oval canopy.

**Use**
A good medium sized street tree with multi-season interest.

**Culture**
Prefers fertile, moist, deep soil and full sun for best flowering and growth.

**Drought Tolerance**
Somewhat tolerant of drought once established.

**Pruning**
No special requirements. Lower, wide-spreading limbs should be kept clear of street right of way.

**Insects & Diseases**
Susceptible when stressed by wet soil. Bores may infest the trunk of young trees.

**Maintenance Issues**
See ‘Pruning’. Produces a heavy crop of seeds.

**Native Range**
Southeastern Europe and Western Asia.

**Specimen Location**
Hargadine Street above Main Street.
‘RAYWOOD’ NARROWLEAF ASH

Fraxinus oxycarpa

Size & Rate of Growth
To 50 feet tall; 30 to 50 feet wide, depending on variety. Moderate growth.

Ornamental Features
Upright oval habit with an open, light-textured canopy. Compound leaves with small leaflets give the tree a delicate, lacy look. Fruit is one inch long including the wing.

Use
The species is not widely available but is known through its cultivars. The cultivars are commonly used as street trees.

Culture
A very adaptable tree. Prefers sunny locations. Transplants easily.

Drought Tolerance
Good.

Pruning
Early pruning may be needed to correct narrow branch angles; especially the variety ‘Flame’.

Insects & Diseases
None serious.

Maintenance Issues
The cultivar ‘Flame’ has narrow branch angles which may result in weak limb attachments. The varieties are seedless.

Native Range
Southern Europe to western Asia.

Varieties & Cultivars
‘Flame’ - has the branch angle problem mentioned above but shows good pest resistance and red fall color. ‘Raywood’ - narrow in youth but opening with age. Fast growing to 30 to 40 feet. Has a reddish purple to yellow fall color and is seedless.

Specimen Location
‘Raywood’ - just below children’s wading area in Lithia Park. ‘Flame’ - on North side of Iowa Street near SOU softball diamonds.
‘SUMMIT’ GREEN ASH

Fraxinus pennsylvanica

Size & Rate of Growth
40 to 50 feet tall and 40 feet wide with a rapid growth rate.

Ornamental Features
Very uniform branching in a symmetrical, broadly oval, upright habit with moderate density. Foliage is glossy medium green changing to a bright yellow in fall.

Use
Adapts well as a street tree in confined soil spaces. Once adapted will grow well in wet or dry areas.

Culture
Full sun.

Drought Tolerance
Tolerant.

Pruning
Prune when young to develop a strong central trunk. Remove upright aggressive branches.

Insects & Diseases
Scale can be a problem.

Maintenance Issues
May lose branches in storms.

Native Range
Parent species native to the east coast of the U.S.

Varieties & Cultivars
‘Summit’, many other varieties are available.

Specimen Location
‘Summit’ - YMCA Park between parking lot and street.
GINKGO, MAIDENHAIR TREE
Ginkgo biloba

Size & Rate of Growth
50 to 60 feet tall in cultivation, with a variable spread; may grow to 90 feet tall in very favorable locations. Moderate growth, but slow initially.

Ornamental Features
Open and narrowly conical when young but becomes a broad, well-proportioned tree with age. Leaf has a distinctive fan shape. Foliage color is light green in the spring and summer, becoming bright yellow-gold in the fall. Flowers are inconspicuous. The fruit, when produced on female trees, is a seed with a fleshy covering about 1 to 1 inches long with a disagreeable odor.

Use
As a street tree where plenty of root room is provided.

Culture
Adaptable to a wide variety of growing conditions. Prefers full sun and is tolerant of air pollution. Transplants easily.

Drought Tolerance
Moderate once established.

Pruning
Needs little pruning, except to correct poor branch unions. May be deep crotched when mature.

Insects & Diseases
None serious.

Maintenance Issues
The fleshy covering on the seed of female trees is extremely messy and foul-smelling. Seeds are not produced until the tree is 10 to 15 years old. To avoid the seeds, plant only male trees obtained from reliable sources. Brittle wood.

Native Range
Southeast China.

Varieties & Cultivars
‘Fastigiata’ - a narrowly columnar type. ‘Autumn Gold’ - upright in youth, becoming broadly spreading with age. ‘Fairmount’ - fast growing with a pyramidal form.

Specimen Location
Younger and more mature specimens are located in the Japanese-style garden in Lithia Park.
Younger street tree planting on corner of Lithia Way and Second St.
Mature – intersection of B and Pioneer.
THORNLESS HONEYLOCUST
Gleditsia triacanthos var. inermis

Size & Rate of Growth
50 to 80 feet with comparable width; fast growth when young, slowing with maturity.

Ornamental Features
Open, spreading habit which casts light shade. Young bark is smooth and flecked with silver; older trunks become brown-black. Pinnately compound leaves are bright green in summer, turning yellow in the fall. Greenish-yellow flowers in May are not showy but are fragrant. Fruit is an eight-inch reddish brown pod. The entire pod is curved. Many varieties are fruitless.

Use
Street tree where broadly spreading fine textured canopy is desired.

Culture
Prefers full sun. This tree tolerates high pH, salt, air pollution and other adverse conditions.

Drought Tolerance
Very good.

Pruning
Remove dead wood.

Insects & Diseases
Pod gall midge, borers, webworms. Leaves are subject to extreme disfiguration due to pod gall midge.

Maintenance Issues
Roots on mature plants may heave pavement if planted near sidewalks. Fruit pods are messy though most varieties are fruitless. Brittle wood. Canopy needs frequent pruning to accommodate road clearance.

Native Range
Eastern United States.

Varieties & Cultivars
Many available, including: 'Moraine' - broad outline, 40 to 50 feet. Fruitless. Shows some resistance to webworm infestations. 'Shademaster' - upright growth habit, foliage dark green, fruitless or nearly so. 'Skyline' - pyramidal form, compact and symmetrical. 'Sunburst' - broad rounded head; new growth golden, changing eventually to light green.

Specimen Location
'Sunburst' - just below Perozzi Fountain, Lithia Park.
**KENTUCKY COFFEETREE**

*Gymnocladus dioicus*

**Size & Rate of Growth**  
50 to 60 feet in height with a 15 to 30 foot spread. Slow growth rate.

**Ornamental Features**  
Ascending branches develop a vase-like form with a globose crown. Rugged winter branch pattern. Large compound leaves. Interesting fruit pods remain on tree during winter.

**Use**  
As a street tree under appropriate conditions. Should be given sufficient root room. Branches arch high over streets. Adaptable to urban conditions.

**Culture**  

**Drought Tolerance**  
Well adapted to drought once established.

**Pruning**  
No special requirements.

**Insects & Diseases**  
None noted.

**Maintenance Issues**  
Pods may be messy.

**Native Range**  
Eastern U.S.

**Varieties & Cultivars**  
May be somewhat difficult to obtain.

**Specimen Location**  
No known location.
GOLDENRAIN TREE
Koelreuteria paniculata

Size & Rate of Growth
30 to 40 feet tall with equal spread; slow to moderate growth.

Ornamental Features
Rounded outline with branches spreading and ascending. Compound leaves have seven to fifteen leaflets with rich green summer color and yellow-brown fall color. Yellow flowers, in upright clusters, appear in summer. The fruits are papery, three-sided pods holding small, black seeds. The pods change from green to yellow to brown, often persistent through winter.

Use
Street tree suitable for planting under power lines.

Culture
Very adaptable tree. Thrives in full sun and withstands heat, wind and alkaline soils. Tolerates air pollution. Due to a deep root system, transplanting is most successful when plant is young.

Drought Tolerance
Good when becoming established, becoming very good at maturity.

Pruning
May require some pruning to establish a strong central leader and to direct low branches away from streets and sidewalks.

Insects & Diseases
None serious, although the coral spot fungus does appear occasionally.

Maintenance Issues
Some authors report weak wood problems. Fruit may also become messy. Sometimes reseeds in vicinity

Native Range
China, Korea.

Varieties & Cultivars
‘Fastigiata’ - narrowly upright habit, 25 feet tall, with a 4 to 6-foot spread. An unnamed variety with striking orange autumn color is being propagated in Ashland.

Specimen Location
299 Meade. Ashland Hospital property off Chestnut St., south of Maple St.
CRAPEMYRTLE
Lagerstroemia indica

Size & Rate of Growth
15 to 25 feet in height with a 10 to 15 foot spread. Slow growing.

Ornamental Features
Multi-trunk form. Colorful flowers in late summer and early fall when very few trees and shrubs are blooming. Good orange to red autumn color. Attractive multi-colored bark.

Use
Under low power lines or as accents in combination with trees that don’t have conspicuous flowers.

Culture
Full sun. Susceptible to powdery mildew in shaded areas. Well drained soil.

Drought Tolerance
Drought tolerant once established.

Pruning
May need pruning to develop a central leader for street tree use.

Insects & Diseases
Fungus problems that occur in other parts of the country are usually not a problem in this area. May occasionally have aphid problems.

Maintenance Issues
See pruning.

Native Range
China and Korea.

Varieties & Cultivars
Many varieties and cultivars based on growth habit and flower color.

Specimen Location
300 block of Helman and near the corner of Siskiyou and Sherman.
**SOUTHERN MAGNOLIA**  
*Magnolia grandiflora*

**Size & Rate of Growth**  
60 to 70 feet tall with a spread of 30 to 40 feet; slow to moderate growth.

**Ornamental Features**  
Low-branching evergreen tree; dense, upright oval habit when young, spreading with age. Dark green leaves are five to ten inches long and drop at the end of their second year. Large, creamy-white flowers are very fragrant. Fruit is a rusty-brown cucumber-like pod which splits open to reveal red seeds.

**Use**  
Large evergreen street tree.

**Culture**  
Full sun to partial shade in moist, well-drained, neutral or slightly acidic soil. Magnolias in general prefer early spring transplanting.

**Drought Tolerance**  
Low to moderate.

**Pruning**  
Prune when young to avoid double leaders. Perform any needed pruning soon after flowering.

**Insects & Diseases**  
None serious.

**Maintenance Issues**  
A very beautiful but messy tree with leaves (which seem almost like plastic), flower parts, and seedheads littering the ground. The roots may lift nearby sidewalks. Surface rooting and dense year-round shade prevent healthy lawn growth beneath the tree. Should be located carefully.

**Native Range**  
Southeastern United States.

**Varieties & Cultivars**  
‘Majestic Beauty’ - leaves very long, broad and heavy. Height to 50 feet. ‘Samuel Sommer’ - strong ascending habit to 40 feet. Leaves with heavy, rusty red fuzziness on underside. ‘Victoria’ - parent plant grown in Victoria, B.C. Tree to 20 feet with very dark green leaves.

**Specimen Location**  
153 Oak Street.
**KOBUS MAGNOLIA**

*Magnolia kobus*

**Size & Rate of Growth**
Develops a pyramidal head 30-40 feet tall with an equal spread. Moderate growth.

**Ornamental Features**
Slightly fragrant 4" white flowers followed by 2" red fruit. Bright yellow fall foliage.

**Use**
Small street tree.

**Culture**
Tolerant of all soil types.

**Drought Tolerance**
Moderate.

**Pruning**
Needs pruning when young to develop a strong central leader and discourage the tendency towards multiple trunks.

**Insects & Diseases**
None serious.

**Maintenance Issues**
Pruning necessary when young.

**Native Range**
Japan

**Specimen Location**
There is a strikingly beautiful grouped planting of this species in front of the BLM building in Medford (3040 Biddle Road).
ORNAMENTAL CRABAPPLES
*Malus spp.*

**Size & Rate of Growth**
Generally less than 30 feet tall; moderate growth.

**Ornamental Features**
Commonly small trees with a rounded to oval habit though the habit will vary depending on the species, variety, or cultivar. Foliage color is predominantly medium green with some plants having significant fall color. Most have beautiful flowers which bloom in May. Fruit is usually less than two inches, with the color ranging from pure red to pure yellow.

**Use**
A good tree for planting under power lines.

**Culture**
Full sun best for development of flowers. Generally prefer well-drained, moist, acidic soil.

**Drought Tolerance**
Most have moderate drought tolerance.

**Pruning**
Pruning may be necessary to keep wide-spreading branches clear of road right-of-way. Best done immediately after flowering since flower buds for the next season are initiated in mid-June to early July.

**Insects & Diseases**
Scale infestations or borers are the most serious insect problems. Some species and cultivars are more resistant to certain diseases than others. Consult local nursery professional or literature.

**Maintenance Issues**
Pruning must be performed regularly to ensure good structure. Should be located well away from curb. Some fruit may be messy on roads and sidewalks.

**Native Range**
Depends on species, variety, or cultivar.

**Varieties & Cultivars**

**Specimen Location**
Corner of Hillcrest and Iowa. Lithia Park south of the Rose Garden.
TUPELO, SOURGUM

*Nyssa sylvatica*

**Size & Rate of Growth**
30 to 50 feet in height with a 15 to 20 foot spread. Long lived, slow growing.

**Ornamental Features**
A pyramidal form with pendulous lower branches. Clean dark green foliage. Beautiful copper-orange autumn color.

**Use**
As a street tree, parking lot island, buffer strip highway shade tree where conditions are appropriate.

**Culture**
Full sun to semi-shade. Moist well-drained soil best; will tolerate wet soil.

**Drought Tolerance**
Poor to moderate once established. Planted in dry site, needs occasional irrigation during drought.

**Pruning**
Lower descending branches should be pruned for street tree use. Needs little or no pruning to develop strong structure. Resistant to limb breakage.

**Insects & Diseases**
None noted.

**Maintenance Issues**
See pruning. Causes some litter.

**Native Range**
Eastern U.S.

**Specimen Location**
Northeast side of Upper Duck Pond, Lithia Park, near water.
SOURWOOD
Oxydendrum arboreum

Size & Rate of Growth
25 to 30 feet in height with a 15 to 20 foot spread. Possibly taller under ideal conditions.
Slow growth rate.

Ornamental Features
Pyramidal form with a rounded top. Glossy green leaves in summer. Flowers in late summer. Beautiful orange autumn color in late October. A row of Sourwood in fall color are memorable.

Use
As a street tree under appropriate conditions. Suitable for planting under power lines.

Culture
Light shade to full sun. Should not be planted in especially hot locations. Best with moist, well-drained soil.

Drought Tolerance
Low initial drought tolerance. Better when well established.

Pruning
Usually not necessary.

Insects & Diseases
None noted.

Maintenance Issues
None.

Native Range
Eastern U.S.

Specimen Location
Adjacent to Winburn Way on north side of Upper Duck Pond in Lithia Park.
**Persian Parrotia**
*Parrotia persica*

**Size & Rate of Growth**
20 to 30 feet in height, possibly higher, with a 15 to 20 foot spread. Slow to medium growth rate.

**Ornamental Features**
Deep lustrous green summer foliage. Multi-trunk form. Yellow orange, gold to orange to rosy pink, long lasting autumn color. Attractive mottled flaking bark. Flowers appear before leaves as red haze.

**Use**
As street tree under appropriate conditions. Upright branching pattern keeps limbs clear of street and sidewalks. Upright ascending vase-shaped form. May be an outstanding specimen tree.

**Culture**
Full sun to light shade. Moist sandy loam soil. Not tolerant of wet conditions.

**Drought Tolerance**
Not drought tolerant.

**Pruning**
Not usually necessary.

**Insects & Diseases**
None.

**Maintenance Issues**
Need protection from sun scald.

**Native Range**
Northwestern Iran.

**Specimen Location**
CHINESE PISTACHE

*Pistache chinensis*

**Size & Rate Of Growth**
40 to 50 feet in height with a similar spread. Slow to moderate growth rate.

**Ornamental Features**
Nicely formed oval-shaped tree with compound ash-like foliage. Brilliant yellow, orange, and red coloration in autumn.

**Use**
A very suitable street tree.

**Culture**
Full sun. Good drainage. Will tolerate less-than-ideal soils.

**Drought Tolerance**
Good once established.

**Pruning**
Must be pruned to initially develop good tree form.

**Insects & Diseases**
None.

**Maintenance Issues**
See pruning. Staking often required on smaller trees. Fruit litter may be a problem on female trees.

**Native Range**
China.

**Varieties & Cultivars**
‘Keith Davey’ - male selection w/no fruit and having excellent autumn color.

**Specimen Location**
Center planting strip in parking lot of YMCA park. A mature specimen at the intersection of Bush and Almond.
FLOWERING PLUM

Prunus cerasifera vars.

Size & Rate Of Growth
15 to 30 feet tall and 15 to 25 feet wide. Moderate growth rate.

Ornamental Features
Upright, dense rounded form. Very popular due to it’s purple leaves. Light pink flowers in early spring.

Use
Good as a street tree.

Culture
Grows best in full sun to bring out the deep purple color of the leaves.

Drought Tolerance
Moderate drought resistance.

Pruning
Prune lightly at regular intervals to correct poor branching habits.

Insects & Diseases
Often succumbs to borers due to compacted soil.

Maintenance Issues
Fruit litter may be a problem with certain varieties.

Varieties & Cultivars
‘Thundercloud’ is the most commonly available but has fruit-bearing problems. ‘Krauter Vesuvius’ has darker purple leaves and bears less fruit. ‘Newport’ has reddish purple leaves, reddish fall color and no fruiting problems. The hybrid ‘x Blireiana’ has double flowers and seldom produces fruit.

Specimen Location
‘Thundercloud’ - 621 Siskiyou. ‘x Blireiana’ - Holmes Ave. opposite baseball diamonds.
SARGENT CHERRY

*Prunus sargentii*

**Size & Rate of Growth**
20 to 35 feet tall, width slightly less than the height; moderate growth.

**Ornamental Features**
Symmetrical, round-topped habit. Attractive reddish-brown bark peels when older in coarse, curly strips. Leaves emerge reddish-bronze, turning dark green during the summer. Fall color is among the best for cherries - vivid red to bronze. Single pink flowers appear in clusters of two to six. Fruit is not very showy, dark purple-black in the summer. Fruit is often eaten by birds.

**Use**
Street tree.

**Culture**
Prefers sun in a fertile, well-drained soil. Highly intolerant of urban pollution. Readily transplanted.

**Drought Tolerance**
Fair when becoming established, moderate when mature.

**Pruning**
Slow to respond from pruning wounds. Prune to shape the tree when young, then avoid pruning as the tree matures.

**Insects & Diseases**
Brown rot, bacterial canker, scale, caterpillars and leaf rollers all may attack flowering cherries.

**Maintenance Issues**
See pruning. May sucker from base at or below graft.

**Native Range**
Northern Japan, Korea.

**Varieties & Cultivars**
‘Columnaris’ - a narrow form with potential as a street tree. ‘Accolade’ has semi-double deep pink flowers.

**Specimen Location**
Along East Main in front of Civic Center.
JAPANESE FLOWERING CHERRIES
Prunus serrulata

Size & Rate Of Growth
20-25 feet tall with 20 foot spread. Moderate growth rate.

Ornamental Features
Symmetrical multi-trunk, upright spreading with a vase or rounded habit. New leaves are bronzy. Spectacular flowers vary from white to deep pink depending upon the variety.

Use
Excellent street tree when given sufficient soil space. Can tolerate clay soils if they are well drained.

Culture
Prefers full sun with good drainage and ample moisture.

Drought Tolerance
Not drought tolerant.

Pruning
Needs little pruning.

Insects & Diseases
Can suffer from cankers, virus and borers.

Maintenance Issues
Does not bear fruit but may need watching for borers.

Varieties & Cultivars
'Mt. Fuji' has profuse clusters of flowers which are pink in bud and open white. 'Kwanzan' has double, deep pink blooms. 'Amanogawa' has a columnar habit with deep pink flowers.

Specimen Location
'Kwanzan' - Upper Duck Pond in Lithia Park between pond and Winburn Way.
CALLERY PEAR
Pyrus calleryana

Size & Rate of Growth
30 to 50 feet tall with 20 to 35 foot spread; moderate to fast growth.

Ornamental Features
Generally conical, although broadening with age. Leaves are dark, glossy green in summer, turning to shades of scarlet in fall. Flowers appear before the leaves and are clusters of pure white blossoms with black stamens. Fruits are small, round and inconspicuous.

Use
Street tree tolerant of urban conditions.

Culture
Full sun exposure gives best growth. Tolerates a variety of soils. Adapts to polluted urban environments. Tolerates limited root room.

Drought Tolerance
Moderate.

Pruning
Occasionally a central leader will need to be trained. As the tree ages, prune to keep shape and remove dead wood. Remove narrow branch angles when young. Prune to keep branches clear of street and sidewalks.

Insects & Diseases
Some varieties susceptible to fire blight and cedar-apple rust.

Maintenance Issues
If narrow branch angles are left unchecked, the branches can break and rip the trunk. Fruit litter can be a problem.

Native Range
China.

Varieties & Cultivars
‘Aristocrat’ - more open form with darker, narrow foliage. Narrow branch angles make it difficult to prune. These same narrow angles cause branch breakage in storms. ‘Chanticleer’ - much narrower than Bradford and thinner in texture. The width is equal to half the height.
‘Redspire’ - a less stiff pyramidal form than Bradford. Leaves turn yellow or red in the fall.
‘Autumn Flame’ - good branch angles, red fall color. Susceptible to fire blight.

Specimen Location
‘Autumn Flame’ - downtown on Main Street.
‘Chanticleer’ - downtown on Main Street.
‘Aristocrat’ - Helman School between playground and Helman Street.
CANYON LIVE OAK

Quercus chrysolepis

Size & Rate of Growth
30 to 60 feet in height with a spread of from 30 to 40 feet. Slow growth rate.

Ornamental Features
An evergreen native oak with a round headed or somewhat spreading form.

Use
As a drought tolerant accent tree where an evergreen is desired.

Culture
Full sun to considerable shade. Poorer growth habit in shade.

Drought Tolerance
Very drought tolerant once established.

Pruning
Some pruning usually necessary to establish a favorable structure.

Insects & Diseases
Perhaps scale.

Maintenance Issues
See Pruning.

Native Range
Southwest Oregon, California.

Varieties & Cultivars
May be somewhat difficult to obtain, not readily available.

Specimen Location
To the right of the entrance to the office parking lot in Lithia Park.
**SCARLET OAK**

*Quercus coccinea*

**Size & Rate of Growth**
50 to 75 feet in height with a 40 to 50 foot spread. Somewhat slow growing.

**Ornamental Features**
Bright green leaves in summer and scarlet red in fall. Younger trees keep leaves in winter. Older trees may lose leaves in fall.

**Use**
A good large-canopied street tree where adequate space is provided.

**Culture**

**Drought Tolerance**
Not greatly drought tolerant but deep roots help.

**Pruning**
Train and prune to develop good structure.

**Insects & Diseases**
No major problems.

**Maintenance Issues**
See Culture and Pruning. A better street tree than Pin Oak which has more lateral and weeping branches.

**Native Range**
Eastern United States.

**Specimen Location**
West side of parking lot, YMCA soccer fields on Tolman Creek Road. Mature trees in front of SOU library.
ENGLISH OAK
Quercus robur

Size & Rate of Growth
60 to 70 feet tall and nearly as wide; moderate to fast growth.

Ornamental Features
Large, round-headed outline. Leaves dark green with three to seven pairs of rounded lobes. No fall color. Leaves either drop green or turn brown and persist. Acorn one to two inches long with the cup covering 1/3 of the nut.

Use
Large street tree. Variety ‘Fastigiata’ good where a large columnar tree is desired.

Culture
Prefers full sun but can tolerate light shade. Moderately tolerant of the urban environment.

Drought Tolerance
Good once established.

Pruning
Low branches may need to be removed to raise the crown.

Insects & Diseases
Susceptible to mildew.

Maintenance Issues
Leaves remain on tree during winter.

Native Range
Europe, northern Africa, western Asia.

Varieties & Cultivars
‘Fastigiata’ - narrow, upright habit, much like Lombardy poplar. Will grow to 55 feet with a 10 to 15 foot width.

Specimen Location
SOU campus, adjacent to the psychology building on University Way.
**RED OAK**

*Quercus rubra*

**Size & Rate of Growth**
50 to 80 feet tall with a spread of 40 to 50 feet; moderate to fast growth.

**Ornamental Features**
Matures to a dome-shaped, wide-spreading, dense form with upwardly curving branches. High branching habit. As trees mature, the upper limbs show a dark streaking over the gray, as if paint had been spilled at the branch junction. New leaves and leaf stalks are often red when emerging. Leaves are dark green during summer, turning red to brown in fall. Acorn is small, about 3/4 to 1 inch.

**Use**
Large canopied street tree.

**Culture**
Grows best in full sun in moist, well-drained, acidic soils but will tolerate other conditions. Performs well in the urban environment. Not tolerant of extremely wet soils.

**Drought Tolerance**
Moderate once established. Needs summer irrigation in fast draining soils.

**Pruning**
Some pruning necessary to develop good street tree form.

**Insects & Diseases**
Scale.

**Maintenance Issues**
Many develop chlorosis in high pH soils.

**Native Range**
Eastern North America.

**Varieties & Cultivars**
‘Aurea’ - new foliage emerges bright yellow in the spring.

**Specimen Location**
Two mature trees are located on lawn between the rose garden and Perozzi Fountain in Lithia Park.
**CORK OAK**

*Quercus suber*

**Size and Rate of Growth**
40 – 70’ in height with a 40 – 50’ spread. Slow growth, long-lived with a trunk as large as 4’ in diameter at maturity

**Ornamental Features**
Small evergreen leaves with a dense broad irregularly shape canopy

**Use**
A fine shade tree

**Culture**
Full sun. Tolerates a variety of soils from acid to alkaline

**Drought Tolerance**
Very drought tolerant once established with irrigation in the first few years

**Pruning**
Careful pruning during youth to create form

**Insects & Disease**
Deer tolerant

**Maintenance Issues**
None known

**Native Range**
Mediterranean Europe and North Africa

**Specimen Location**
292 Gresham on Holly Street side
233 4th Street
**EUROPEAN MOUNTAIN ASH**

*Sorbus aucuparia*

**Size & Rate of Growth**
35 to 45 feet tall, with a width 2/3 to equal the height; moderate growth.

**Ornamental Features**
Oval, dense habit. Leaflet color is dull green in summer, turning yellow, orange or red in fall. Individual creamy white flowers are small but are borne in a flat-topped cluster of from three to five inches in diameter in late spring. Fruit is orange-red, berry-like, in clusters; showy in midsummer. The fruit may persist through the winter unless eaten by birds. The weight of the fruit often bends the outer stems of the branches.

**Use**
Street tree. Good for wildlife.

**Culture**
Best growth occurs in full sun or light shade; average soils. Tolerates wind and heat.

**Drought Tolerance**
Poor.

**Pruning**
Remove narrow branch angles when young. Does not heal well from major pruning cuts or automobile damage.

**Insects & Diseases**
Sun scald may be a problem where trunk is exposed to strong southwestern sunlight. Fire blight can be a serious problem.

**Maintenance Issues**
Fruit can be messy, especially over pavement, though birds often remove fruit.

**Native Range**
Europe, Asia Minor.

**Varieties & Cultivars**
‘Cardinal Royal’ - the large, bright red fruits color early. Many other Sorbus species, having less availability than S. aucuparia, might be worthwhile as street trees.

**Specimen Location**
320 Iowa.
**JAPANESE SNOWBELL**

*Styrax japonicus*

### Size & Rate of Growth
20-30' tall with equal spread. Slow growing.

### Ornamental Features
Lovely small tree with a broadly rounded head. Pendulous white flowers in spring followed by dry tan colored drupes. Bright yellow fall foliage.

### Use
Small street tree. Could be used under power lines.

### Culture

### Drought Tolerance
Not drought resistant.

### Pruning
Remove suckers to reveal graceful horizontal habit.

### Insects & Diseases
None.

### Maintenance Issues
Wide-spreading branches may be a hindrance to sidewalks and street traffic. Fruit debris may be a problem.

### Native Range
Japan, China, Korea

### Varieties & Cultivars
‘Pink Chimes’ has pink blooms on a more upright tree. ‘Obassia’ fragrant, oval in youth and more rounded at maturity.

### Specimen Location
With Rhododendrons east of Perozzi fountain in Lithia Park.
**BALDCYPRESS**

*Taxodium distichum*

### Size & Rate of Growth

50 to 70 feet in height with a 20 to 30 foot spread. Moderate growth rate; long lived.

### Ornamental Features

A fine textured deciduous conifer. Slender, pyramidal habit. Foliage and appearance somewhat similar to that of the Dawn Redwood. The trunk is unusually flared at the base.

### Use

As a street tree, especially where a narrow growing tree is desired. Buffer strip, shade tree specimen, clipped hedge or screen; urban tolerant.

### Culture

Best in full sun with a moist sandy loam. Will tolerate wet or dry sites.

### Drought Tolerance

Good once established.

### Pruning

Usually unnecessary except to prune lower limbs away from sidewalks and street.

### Insects & Diseases

Resistant.

### Maintenance Issues

See Pruning. ‘Knees’ and shallow roots may heave sidewalks and push out curbs.

### Native Range

Southeastern U.S.

### Varieties & Cultivars

‘Shawnee Brave’ - 15 to 20 feet wide has a narrow, pyramidal form.

### Specimen Location

YMCA soccer fields parking lot off Tolman Creek Road on northeast side of lot.

Elks Lodge parking lot bio-shale on Lithia Way.
**LITTLELEAF LINDEN**

*Tilia cordata*

**Size & Rate of Growth**
40 to 55 feet in height with a width of 2/3 the height; moderate growth.

**Ornamental Features**
Broadly pyramidal to upright oval habit. Leaves are 1 to 3 inches long, equally broad or broader dark green above, silvery below. Fragrant yellow flowers are borne in two to three inch clusters in June or early July. Bees attracted to flowers. Fruits are small nutlets.

**Use**
Street tree and lawn specimen.

**Culture**
Prefers full sun, well-drained fertile soil. Tolerant of the urban environment.

**Drought Tolerance**
Moderate.

**Pruning**
Young trees benefit from staking and shaping to establish a strong central leader. Mature trees require infrequent corrective pruning.

**Insects & Diseases**
Aphids.

**Maintenance Issues**
Aphid infestation may cause honeydew. Remove basal suckers.

**Native Range**
Europe.

**Varieties & Cultivars**
‘Pyramidalis’ - narrow habit.

**Specimen Location**
Parking lot behind 368 Main Street.
**CHINESE ELM**

*Ulmus parvifolia*

**Size & Rate of Growth**
40 to 60 feet tall; moderate to fast growth.

**Ornamental Features**
Wide spreading with pendulous twigs and branch ends. Mottled bark combines hues of grays, greens, oranges and browns. Leathery green leaves are one to three inches in length. In milder conditions, the leaves may remain evergreen over the winter. In more northern climates, they may have a fall color in tones of red, yellow, and purple. Small seeds have wings.

**Use**
Lawn specimen, street tree, and screen.

**Culture**
Full sun, moist, well-drained soils preferred. Will tolerate unfavorable conditions.

**Drought Tolerance**
Reasonably good.

**Pruning**
Frequent light thinning is preferred - occasional heavy pruning promotes a flush of unattractive growth. Prune in fall or winter.

**Insects & Diseases**
Shows resistance to Dutch elm disease, Elm leaf beetle and Japanese beetle.

**Maintenance Issues**
Weak wood may result in damage during storms. Avoid injury to surface roots and lower trunk. Potential to lift sidewalks and pavement.

**Native Range**
China, Japan.

**Varieties & Cultivars**
‘Blake’ - branches sweep upward.

**Specimen Location**
No known location.

**Note**
This species is often confused with Ulmus pumila, the Siberian elm. The Siberian elm is inferior to the Chinese elm because the Siberian elm has weak wood, is a prolific seed producer which causes a litter problem, and is much more susceptible to annual elm leaf beetle damage.
ZELKOVA
Zelkova serrata

Size & Rate of Growth
50 to 80 feet tall; moderate to fast growth.

Ornamental Features
This elm tree relative is low branched, with a vase-shaped outline and a rounded top. As tree matures, the bark begins to exfoliate. Dark green leaves are oval and slightly rough on top. Fall color varies from red to yellow. Flowers and tiny woody fruits are inconspicuous.

Use
Street tree where sufficient root room is provided.

Culture

Drought Tolerance
Once the plant is well established, it shows good drought tolerance.

Pruning
Dense crown may be thinned when young. Since it tends to branch low, care must be taken to keep limbs from obstructing streets.

Insects & Diseases
Resistant to Dutch elm disease and elm leaf beetle.

Maintenance Issues
May be susceptible to damage from late frost when young.

Native Range
Japan.

Varieties & Cultivars
‘Village Green’ - fast growing form with smooth, straight trunk and superior fall color.
‘Green Vase’ - more upright branching structure.

Specimen Location
In playground at Helman School. In playground in Lithia Park.
NON-RECOMMENDED STREET TREES

The following trees may be of value as street trees when properly located and cared for. However, they may cause or be subject to the indicated problems.

*Acer macrophyllum* (Big Leaf Maple)
Reason: Doesn’t react well to confined root space. Leaf scorch in summer.

*Aesculus species* (Horse Chestnuts)
Reason: Messy; roots heave sidewalks.

*Ailanthus altissima* (Tree of Heaven)
Reason: Invasive root system. If used, a male tree should be chosen.

*Alnus species* (Alder)
Reason: Wind damage, shallow invasive roots.

*Catalpa speciosa* (Western Catalpa)
Reason: Bark is thin and easily damaged by mechanical impact; branches drop, pods drop during summer causing a mess and may scorch.

*Cornus mas* (Cornelian cherry)
Reason: Falling fruit is messy and stains sidewalks.

*Fraxinus velutina ‘Modesto’* (Modesto Ash)
Reason: Subject to Anthracnose. Often poor branch structure.

*Labumum x watereri* (Goldenchain)
Reason: Poisonous.

*Morus alba* (Fruitless Mulberry)

*Platanus acerifolia* (Sycamore)
Reason: A tree of great beauty but has strong surface roots, subject to Anthracnose, messy, solar unfriendly.

*Picea, Pseudotsuga, etc.* (Evergreen Conifers)

*Quercus palustris* (Pin Oak)
Reason: Lower branches tend to weep, obstruct traffic and visibility.
Although the Commission feels that total exclusion of any tree would be inappropriate, it recognizes that some trees may cause problems when used as street trees. The following species are normally prohibited for one or several of the following reasons: 1) their roots cause injury to sewers or pavements; 2) they are particularly subject to insects or diseases; 3) they cause safety and visibility problems along streets and at intersections; 4) they create messy sidewalks and pavements. These trees are prohibited for use as street trees except under special circumstances. Their use must be approved by the Planning Commission.

<table>
<thead>
<tr>
<th>LATIN NAME</th>
<th>COMMON NAME</th>
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<tbody>
<tr>
<td>Juglans species</td>
<td>Walnut</td>
</tr>
<tr>
<td>Maclura pomifera</td>
<td>Osage Orange</td>
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<tr>
<td>Morus, Prunus, etc. (weeping)</td>
<td>Weeping varieties of various mulberries, crabapples, cherries, etc.</td>
</tr>
<tr>
<td>Morus alba</td>
<td>Fruiting Mulberry</td>
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<tr>
<td>Populus trichocarpa, tremuloides, etc.</td>
<td>Poplar &amp; related species</td>
</tr>
<tr>
<td>Prunus, Pyrus, etc. (fruiting)</td>
<td>Commercial Fruit Trees</td>
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<tr>
<td>Salix babalonica</td>
<td>Weeping Willow</td>
</tr>
<tr>
<td>Ulmus americana</td>
<td>American Elm</td>
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<tr>
<td>Ulmus pumila</td>
<td>Siberian Elm</td>
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