La Junta Downtown Street Tree Inventory

Report to La Junta Urban Renewal Authority
July 14th, 2011
Street Trees Play an Important Role in the Economic Vitality of Downtown Shopping Districts

Grand Junction—
Main street early 1900’s

Main street 2008
Street Trees Influence the Perceptions of Shoppers

A Study done by the University of Washington across 7 states revealed:

(please see attached handouts “Trees On Main Street: Influences on Retail and Shopping Behavior”, and “Trees in Small City Business Districts: Comparing Resident and Visitor Response”)

- Shoppers perceived tree lined shopping districts as having higher place character
- Shoppers perceived tree lined shopping districts as having higher quality products and merchants
- Shoppers were willing to travel longer distances, pay more for parking, stay longer, and visit tree lined shopping districts more often

Bottom Line: Tree lined downtown shopping districts influence longer and more frequent visits

Longer and more frequent visits mean more revenue for merchants!
Downtown La Junta Street Tree Summary Data
Inventory Methodology

- Data was collected for each tree and entered into an MSExcel spreadsheet -
  - Location-tree ID assigned to each tree
  - Species
  - Condition
  - Placement
  - Suggested Immediate Management Needs
  - Other Comments
- Each data category is assigned a value
- Graphs are then created based on the values
# Inventory Methodology

## Community Forestry Inventory Code Sheet

<table>
<thead>
<tr>
<th>Management Unit-MUT</th>
<th>Species Code-SPP</th>
<th>Condition Code – CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown La Junta</td>
<td>Codes for 75 species on back</td>
<td>0 – Dead (0%)</td>
</tr>
<tr>
<td>Santa Fe - 1st thru 6th</td>
<td></td>
<td>1 – Very Poor (20%)</td>
</tr>
<tr>
<td>Colorado – 1st thru 6th</td>
<td></td>
<td>2 – Poor (40%)</td>
</tr>
<tr>
<td>Raton – 1st thru 6th</td>
<td></td>
<td>3 – Fair (60%)</td>
</tr>
<tr>
<td>1st thru 6th between Santa Fe and Raton</td>
<td></td>
<td>4 – Good (80%)</td>
</tr>
<tr>
<td></td>
<td>Size Code-DBH</td>
<td>5 – Excellent (100%)</td>
</tr>
<tr>
<td>&lt;1.4” = 1”</td>
<td></td>
<td>6 – Space Available</td>
</tr>
<tr>
<td>1.5”-2.4” = 2”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5”-3.4” = 3”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5”-4.4” = 4”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5”-5.4” = 5”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.5”-6.4” = 6”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and so on……</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Placement Code – PLC</th>
<th>Management Needs – NED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – Liability (0%)</td>
<td>0 – Remove (Non-hazardous trees)</td>
</tr>
<tr>
<td>1 – Very Poor (20%)</td>
<td>1 – Priority 1 Prune/Remove (Hazard Trees)</td>
</tr>
<tr>
<td>2 – Poor (40%)</td>
<td>2 – Priority 2 Prune (Clearance)</td>
</tr>
<tr>
<td>3 – Fair (60%)</td>
<td>3 – Priority 3 Prune (Rotation)</td>
</tr>
<tr>
<td>4 – Good (80%)</td>
<td>4 – Plant (used w/ space only)</td>
</tr>
<tr>
<td>5 – Excellent (100%)</td>
<td>5 – Water/Fertilize/Aerate</td>
</tr>
<tr>
<td></td>
<td>6 – Stake or Protect</td>
</tr>
<tr>
<td></td>
<td>7 – Treat Insects</td>
</tr>
<tr>
<td></td>
<td>8 – Sample/Treat Disease</td>
</tr>
<tr>
<td></td>
<td>9 – OK, do nothing</td>
</tr>
<tr>
<td></td>
<td>10 – Remove Tree, Don’t replace</td>
</tr>
<tr>
<td></td>
<td>11 – Replace Tree</td>
</tr>
</tbody>
</table>
### Inventory Methodology

#### Example of data spreadsheet

<table>
<thead>
<tr>
<th>TREE ID</th>
<th>MUT</th>
<th>SPP</th>
<th>DBH</th>
<th>CON</th>
<th>PLC</th>
<th>NED</th>
<th>STREET</th>
<th>LOCATION DESCRIPTION</th>
<th>COMMENTS/SUGGESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>18</td>
<td>20</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>Santa Fe</td>
<td>102 Rocky Mtn Eye Center</td>
<td>Remove grate, prune branches away from bldg</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>11</td>
<td>15</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>Santa Fe</td>
<td>110 Chamber of Commerce</td>
<td>Remove grate, hit hard by lilac ash-borer, preventive spray annually, rotational pruning</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>18</td>
<td>15</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>Santa Fe</td>
<td>TO's Tavern</td>
<td>Remove grate, prune branches away from bldg</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>17</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>Santa Fe</td>
<td>208 Town Square Mall</td>
<td>Remove grate, prune branches away from bldg, annually remove base suckers and water sprout</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>11</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>11</td>
<td>Santa Fe</td>
<td>212 Ark Valley Home Care</td>
<td>Remove grate, tree riddled with lilac-ash borer beyond treatment; dieback throughout tree</td>
</tr>
</tbody>
</table>

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La Junta Downtown Street Tree Inventory 2011

Tree Diversity

- Elm, American
- Elm, Siberian
- Kentucky Coffee Tree
- Cherry, Canda Red
- Tree-of-Heaven
- Honeylocust
- Ash, Green
- Plum
- Pear, Bradford
La Junta Downtown Street Tree Inventory 2011

Tree Condition

- excellent
- good
- fair
- poor
- very poor
- dead

7 excellent
32 good
16 fair
2 poor
0 very poor
0 dead
La Junta Downtown Street Tree Inventory 2011

*Immediate Management Needs*

1. Remove
2. Prune or Remove Hazardous Tree
3. Prune for Clearance/Prune defective limb(s)
4. Rotational Prune
5. Water/Fertilize/Aerate
6. Stake or Protect
7. Treat for Insects
8. Sample for disease
9. OK-do nothing
10. Remove-do not replace
11. Replace existing tree

*Management Needs Applicable to All Trees*
- Removal of tree grates
- Rotational Pruning
Example of Clearance Pruning
Example of Treat for Insects

green ash; lilac-ash borer
Example of *Replace Existing Tree*

- Green ash trees irreversibly damaged by lilac-ash borer
- Trees in poor condition
- Invasive Species (e.g. tree of heaven)
Planting Spaces Available = 49

- EXISTING Planting Space Available: 18
- Planting Space Available if cement removed: 31

La Junta Downtown Street Tree Inventory 2011
Example of *Planting Space Available*
Example of *Planting Space Available if Cement Removed*
Summary Comments/Suggestions

Immediate Direct Actions

- **Remove Tree Grates**
  
  tree grates:
  
  - create a tripping hazard
  - girdle tree trunks
  - compromise the structure of the tree by damaging the root flare

- **Rotational Prune All Trees**
  
  - Create a bi-annual rotational pruning schedule; prune each tree every other year
  - Prune for structure, clearance, dead/diseased
  - However, correct pruning practices are a MUST!!
  - Consult with CSFS on proper pruning practices
  - Train specific individuals and assign them to be responsible for pruning
Immediate Direct Actions...continued

• Plant trees in available planting spaces

• For existing trees that need removed, REPLACE them with another tree
Problems with Tree Grates
Alternatives to Tree Grates

- Pea gravel
- Wood chip mulch
Replace Trees with Trees if the site is suitable for planting (e.g. enough space, no conflicts with utilities)
General Guidelines for Selecting and Planting Street Trees

• Select appropriate species for the site
• Trees need space for the root flare/root system
• Generally, a 4’x4’ space is adequate for small maturing trees
• However, if more space is available, planting a larger maturing tree can be appropriate as well
• Consider visual clearance at intersections
• Consider interference with utilities: underground/overhead/gas meters, etc.
• Consider things like light poles
• Must work with City Engineer to make sure all codes are met
Examples of Poor Space Allocation for Street Trees
Examples of Adequate Planting Spaces for Smaller Maturing Trees

Notice no tree grate and rock for mulch—GREAT!
Examples of Adequate Planting Spaces for Large Maturing Trees
A Few Trees Would Benefit by Expanding the Tree Planting Space, instead of removing the tree.
Considerations for Space Expansion of an Existing Tree or Removing Cement to Plant a New Tree

- Make sure ADA (and other engineering codes/standards can still be met)
- Expanding a tree space is probably cheaper than removing the tree and replacing with cement
- For a small maturing tree, a 4’x4’ space is strongly recommended
- For a large maturing tree, a 6’x6’ space is strongly recommended
- However, the spaces do not have to be “square”
- For example, for an existing tree that would benefit from space expansion, evaluate the horizontal potential for expansion as well as vertical—a “rectangle” might work just as well
Summary Comments/Suggestions

Planning for Successful, Long-term Sidewalk Planting
- All parties involved agree that street trees are an important asset to the Town (local government, businesses, citizens)
- Selected trees will fit in the horizontal and vertical available space AT MATURITY
- Selected trees will tolerate the harsh growing conditions (radiant heat, minimal watering)
- Trees will be planted in a spot that will allow them to be an asset and thrive
- Develop a simple maintenance plan that is easily implemented (e.g. rotational pruning, supplemental watering, mulching). The tree board can play critical role in developing and implementing this maintenance plan
- Have a short term goal of replacing trees and planting in available spaces
- Have a long term goal of planning for increasing the number of street trees
Next Steps?

Coordinate with Chamber of Commerce to bring all businesses together and the City of La Junta to begin working on a plan to ensure trees remain a vital part of the Downtown Business District.
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International Society of Arboriculture Certified Arborist