### Table 1: Age

<table>
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<th>OVER 65</th>
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<th>OVER 65 PERCENT</th>
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<td>28.6</td>
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Source: 5 year ACS 2014 Table B01001

### Table 2A: Race and Ethnicity

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<th>Total</th>
<th>Non-Hispanic White</th>
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<th>Non-Hispanic Other</th>
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<td>74</td>
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<td>52</td>
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<td>11</td>
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<td>0</td>
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Source: 5 Year ACS 2014 Table B03002

### Table 2B: Race and Ethnicity, Percents

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<th>Non-Hispanic Asian</th>
<th>Non-Hispanic Other</th>
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<td>1.7</td>
<td>3.4</td>
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<td>8.4</td>
<td>0.0</td>
<td>0.8</td>
<td>0.0</td>
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<td>0.0</td>
<td>1.9</td>
<td>0.2</td>
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<td>28.3</td>
<td>0.5</td>
<td>0.4</td>
<td>8.3</td>
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<td>11.6</td>
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<td>0.0</td>
<td>7.7</td>
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<td><strong>19.1</strong></td>
<td><strong>1.9</strong></td>
<td><strong>0.9</strong></td>
<td><strong>7.5</strong></td>
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Source: 5 Year ACS 2014 Table B03002
### Table 3: Household Characteristics

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<tr>
<th>Block Group</th>
<th>Households</th>
<th>Family Households</th>
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<th>Zero Vehicle</th>
<th>Percent Zero Vehicle</th>
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<tr>
<td>291892144002</td>
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<td>56</td>
<td>15.3</td>
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<td>693</td>
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<td>79</td>
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<td>70.5</td>
<td>62</td>
<td>6.4</td>
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Source: 5 year ACS 2014 Tables B11001 and B25044

### Table 4A: Household Size

<table>
<thead>
<tr>
<th>Block Group</th>
<th>1 Person</th>
<th>2 Person</th>
<th>3 Person</th>
<th>4 Person</th>
<th>5 Person</th>
<th>6 Person</th>
<th>7+Person</th>
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</thead>
<tbody>
<tr>
<td>291892144002</td>
<td>176</td>
<td>232</td>
<td>110</td>
<td>138</td>
<td>37</td>
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<td>97</td>
<td>121</td>
<td>49</td>
<td>34</td>
<td>40</td>
<td>0</td>
<td>24</td>
</tr>
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<td>291892145002</td>
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<td>233</td>
<td>84</td>
<td>31</td>
<td>68</td>
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<td>10</td>
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<td>291892145003</td>
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Source: 5 year ACS 2014 Table B11016

### Table 4B: Household Size, Percents

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<th>Block Group</th>
<th>1 Person</th>
<th>2 Person</th>
<th>3 Person</th>
<th>4 Person</th>
<th>5 Person</th>
<th>6 Person</th>
<th>7+Person</th>
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<td>33.2</td>
<td>13.4</td>
<td>9.3</td>
<td>11.0</td>
<td>0.0</td>
<td>6.6</td>
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<td>9.8</td>
<td>0.0</td>
<td>1.4</td>
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<tr>
<td>291892145003</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>291892146014</td>
<td>39.3</td>
<td>29.4</td>
<td>19.9</td>
<td>8.9</td>
<td>2.5</td>
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<td>0.0</td>
</tr>
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<td>291892146022</td>
<td>25.5</td>
<td>30.3</td>
<td>23.1</td>
<td>12.6</td>
<td>8.0</td>
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<td><strong>32.8</strong></td>
<td><strong>15.8</strong></td>
<td><strong>11.6</strong></td>
<td><strong>6.2</strong></td>
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</table>

Source: 5 year ACS 2014 Table B11016
### Table 5A: Educational Attainment for Persons Over Age 25

<table>
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<tr>
<th>Block Group</th>
<th>Over 25</th>
<th>Less than High School Diploma</th>
<th>High School or GED</th>
<th>Some College</th>
<th>Bachelor's Degree</th>
<th>Post-Graduate Degree</th>
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<td>585</td>
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<td>116</td>
<td>207</td>
<td>169</td>
<td>62</td>
<td>50</td>
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<tr>
<td>291892145002</td>
<td>1039</td>
<td>111</td>
<td>314</td>
<td>339</td>
<td>191</td>
<td>84</td>
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<td>148</td>
<td>157</td>
<td>64</td>
<td>57</td>
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<td>23</td>
<td>194</td>
<td>126</td>
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<td>1932</td>
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</table>

Source: 5 Year ACS 2014, Table B15003

### Table 5B: Educational Attainment for Persons Over Age 25, Percents

<table>
<thead>
<tr>
<th>Block Group</th>
<th>Over 25</th>
<th>Less than High School Diploma</th>
<th>High School or GED</th>
<th>Some College</th>
<th>Bachelor's Degree</th>
<th>Post-Graduate Degree</th>
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<td>34.3</td>
<td>28.0</td>
<td>10.3</td>
<td>8.3</td>
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<td>30.2</td>
<td>32.6</td>
<td>18.4</td>
<td>8.1</td>
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<td>27.9</td>
<td>29.6</td>
<td>12.1</td>
<td>10.8</td>
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<td>37.9</td>
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<td>1.2</td>
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<td>49.4</td>
<td>32.1</td>
<td>7.1</td>
<td>5.6</td>
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<tr>
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<td>35.1</td>
<td>32.6</td>
<td>11.8</td>
<td>4.7</td>
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</table>

Source: 5 Year ACS 2014, Table B15003

### Table 6: Limited English Speaking Households as Percent of All Households

<table>
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<tr>
<th>Block Group</th>
<th>Speak Spanish</th>
<th>Speak Other Indo-European Language</th>
<th>Speak Asian Language</th>
<th>Speak Other Language</th>
</tr>
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<tr>
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<td>Households</td>
<td>Percent</td>
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<td>13</td>
<td>3.6</td>
</tr>
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<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>291892145003</td>
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<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>291892146014</td>
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<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>291892146022</td>
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<td>0.0</td>
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<td>0.0</td>
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</table>

Source: 5 Year ACS 2014, Table B16002
### Table 7: Persons who Speak English Less than Very Well as Percent of All Persons Over Age 5

<table>
<thead>
<tr>
<th>Block Group</th>
<th>Speak Spanish</th>
<th>Speak Other Indo-European Language</th>
<th>Speak Asian Language</th>
<th>Speak Other Language</th>
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<td>0</td>
<td>0.0</td>
<td>26</td>
<td>2.9</td>
</tr>
<tr>
<td>291892145002</td>
<td>11</td>
<td>0.8</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>291892145003</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>291892146014</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>291892146022</td>
<td>72</td>
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<td>16</td>
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<tr>
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<td>0</td>
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<td>0.0</td>
</tr>
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<td><strong>Total</strong></td>
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<td><strong>42</strong></td>
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</table>

Source: 5 Year ACS 2014, Table B16004

### Table 8A: Household Income

<table>
<thead>
<tr>
<th>Block Group</th>
<th>Under $25,000</th>
<th>$25,000 - $50,000</th>
<th>$50,000 - $75,000</th>
<th>$75,000 - $100,000</th>
<th>Over $100,000</th>
</tr>
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<tbody>
<tr>
<td>291892144002</td>
<td>85</td>
<td>245</td>
<td>211</td>
<td>130</td>
<td>48</td>
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<tr>
<td>291892145001</td>
<td>120</td>
<td>102</td>
<td>63</td>
<td>26</td>
<td>54</td>
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<td>99</td>
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<td><strong>Total</strong></td>
<td><strong>1021</strong></td>
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<td><strong>690</strong></td>
<td><strong>490</strong></td>
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</table>

Source: 5 Year ACS 2014, Table B19001

### Table 8B: Household Income, Percents

<table>
<thead>
<tr>
<th>Block Group</th>
<th>Under $25,000</th>
<th>$25,000 - $50,000</th>
<th>$50,000 - $75,000</th>
<th>$75,000 - $100,000</th>
<th>Over $100,000</th>
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<tbody>
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<td>11.8</td>
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<td>8.8</td>
<td>10.4</td>
<td>10.4</td>
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<td><strong>Total</strong></td>
<td><strong>26.8</strong></td>
<td><strong>30.9</strong></td>
<td><strong>18.1</strong></td>
<td><strong>12.8</strong></td>
<td><strong>11.4</strong></td>
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Source: 5 Year ACS 2014, Table B19001
## Table 9: Labor Force Status

<table>
<thead>
<tr>
<th>Block Group</th>
<th>Total Over Age 16</th>
<th>In Labor Force</th>
<th>Civilian Labor Force</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Armed Forces</th>
<th>Not In Labor Force</th>
<th>Percent Unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>291892144002</td>
<td>1808</td>
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<td>1362</td>
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<td>564</td>
<td>564</td>
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<td>46</td>
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<td>1202</td>
<td>828</td>
<td>821</td>
<td>755</td>
<td>66</td>
<td>7</td>
<td>374</td>
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<td>569</td>
<td>352</td>
<td>352</td>
<td>309</td>
<td>43</td>
<td>0</td>
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<td>846</td>
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<td>663</td>
<td>634</td>
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<td>1909</td>
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<td>96</td>
<td>0</td>
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<td>514</td>
<td>265</td>
<td>265</td>
<td>265</td>
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<td>0</td>
<td>249</td>
<td>0.0</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>7536</strong></td>
<td><strong>5391</strong></td>
<td><strong>5384</strong></td>
<td><strong>5030</strong></td>
<td><strong>354</strong></td>
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<td><strong>2145</strong></td>
<td><strong>6.6</strong></td>
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Source: 5 Year ACS 2014, Table B23025

## Table 10: Housing Units

<table>
<thead>
<tr>
<th>Block Group</th>
<th>Total Units</th>
<th>Occupied</th>
<th>Owner-Occupied</th>
<th>Renter Occupied</th>
<th>Percent Occupied</th>
<th>Owner Occupied (Percent of All Occupied)</th>
</tr>
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<tbody>
<tr>
<td>291892144002</td>
<td>789</td>
<td>719</td>
<td>418</td>
<td>301</td>
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<td>365</td>
<td>232</td>
<td>133</td>
<td>93.6</td>
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<td>232</td>
<td>17</td>
<td>81.4</td>
<td>93.2</td>
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<td><strong>Total</strong></td>
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<td><strong>3814</strong></td>
<td><strong>2441</strong></td>
<td><strong>1373</strong></td>
<td><strong>92.0</strong></td>
<td><strong>64.0</strong></td>
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</table>

Source: 5 Year ACS 2014, Tables B25002 and B25003

## Table 11: Poverty

<table>
<thead>
<tr>
<th>Block Group</th>
<th>Individuals in Poverty</th>
<th>Individual Poverty Rate</th>
<th>Families in Poverty</th>
<th>Family Poverty Rate</th>
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<tr>
<td>291892144002</td>
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<td>15</td>
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<td>26.8</td>
<td>61</td>
<td>26.3</td>
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<tr>
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<td><strong>17.3</strong></td>
<td><strong>314</strong></td>
<td><strong>14.1</strong></td>
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Source: 5 Year ACS 2014, Tables B17010 and B17021
### Table 11: Disability

<table>
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<tr>
<th>Population basis</th>
<th>Has a Disability</th>
<th>Disability Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>29189214400</td>
<td>4890</td>
<td>532</td>
</tr>
<tr>
<td>29189214500</td>
<td>3154</td>
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<tr>
<td>29189214601</td>
<td>4061</td>
<td>496</td>
</tr>
<tr>
<td>29189214602</td>
<td>4138</td>
<td>548</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16243</strong></td>
<td><strong>1856</strong></td>
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</table>

Source: 5 Year ACS 2014, Table B18101

### Table 12: Employment (Place of Work)

<table>
<thead>
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<th>Employment</th>
<th>Percent of Total</th>
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<td>291892145001</td>
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<td>30</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>5143</strong></td>
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</tbody>
</table>

Source: Dun and Bradstreet
First Public Meeting
Great Streets:

- Are **Great places**
  - local identity & walkability

- **Integrate land use & transportation**
  - planning design to a vision

- Accommodate **all users and modes**
  - trip type - “to, through, & within” accessible for everyone

- Are **economically vibrant**
  - complementary uses

- Are **environmentally responsible**
  - practical
  - more than just storm water

- Rely on **current thinking**
  - adapting what works best

- Are **measurable**
  - performance measures
  - guide the process
  - relate to RTP & funding

- Develop collaboratively
  - multi disciplinary team
  - iterative community input
Great Streets Emphasize:

**The Product**
- The Plan
- Prepared Local Leadership
- Tools for Implementation

**The Process**
- Multi-disciplinary consultant team
- Iterative local input
- Envision land use – all else supports that
- Best Practices

Combining local knowledge (residents, owners, proprietors, leadership, etc.) with technical expertise (multi disciplinary team)

Iterative feedback loops
Benefits:

• The infrastructure and systems are designed to achieve the community’s vision for their place
• A better balanced transportation network
• Enhanced community identity
• Economic vitality
• Reduced load on utilities
• Neighborhoods that work better for all ages and capabilities

“To design a street according to its intended use is a reasonable but uncommon practice.”

Harland Bartholomew
Our Scope of Work:

- The technical team (market, urban, environmental, and transportation planners) reviews existing conditions and works with people who know the community to define a vision forward and a means to achieve it.

- The end product is a technical planning report with specific recommended steps to implement the end goals.
Schedule:

- Preparation time

<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>9:00 A.M.</td>
<td>Project Team Meeting</td>
<td>Project Team Meeting</td>
<td>Project Team Meeting</td>
<td>Project Team Meeting</td>
</tr>
<tr>
<td>9:30 A.M.</td>
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<tr>
<td>10:00 A.M.</td>
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<tr>
<td>11:00 A.M.</td>
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<tr>
<td>11:30 A.M.</td>
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<tr>
<td>12:00 P.M.</td>
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<td>1:00 P.M.</td>
<td>Project Team Meeting</td>
<td>Individual and Focus Group Discussions (Open to the Public)</td>
<td>Design Team Working Session (Open to the Public)</td>
<td>Design Team Working Session (Open to the Public)</td>
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<td>2:00 P.M.</td>
<td>Individual and Focus Group Discussions (Open to the Public)</td>
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<tr>
<td>3:00 P.M.</td>
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<td>Project Team Meeting</td>
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<td>Public Kick-Off Meeting</td>
<td>Public Feedback Session</td>
<td>Project Team Meeting</td>
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<td>No Evening Session</td>
<td>Public Wrap Up and Next Steps Session</td>
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<tr>
<td>6:00 P.M.</td>
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<tr>
<td>7:00 P.M.</td>
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<tr>
<td>8:00 P.M.</td>
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<td></td>
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<tr>
<td>9:00 P.M.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The end report will be finished this June

Strategic Planning Report:

- The end document will record the “vision” for the corridor
- It will state the major issues and goals
- It will clarify what decisions were made during this process.
- It will detail recommended next steps
  - Scope
  - Additional Investigation
  - Responsibility
  - Likely Budget
  - Sequence
Market Analysis

City of Overland Population 1940-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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<tr>
<td>1940</td>
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<td>1950</td>
<td>11,566</td>
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<tr>
<td>1960</td>
<td>22,763</td>
</tr>
<tr>
<td>1970</td>
<td>24,819</td>
</tr>
<tr>
<td>1980</td>
<td>19,620</td>
</tr>
<tr>
<td>1990</td>
<td>17,987</td>
</tr>
<tr>
<td>2000</td>
<td>16,838</td>
</tr>
<tr>
<td>2010</td>
<td>16,062</td>
</tr>
<tr>
<td>EST. 2014</td>
<td>15,985</td>
</tr>
</tbody>
</table>
Household Income Density 2014

2015 Per Capita Income

City of Overland: $21,900
St. Louis County: $35,700

Retail Purchasing Power and Corridor Sales

- Auto Parts & Tires
- Furniture, Furnishings
- Electronics & Appplicances
- Building and Hardware
- Groceries
- Health & Personal Care
- Gas Stations
- Clothing & Accessories
- Sports, Books, Music
- General Merchandise
- Miscellaneous
- Full Service Restaurants
- Limited Service Restaurants
- Drinking Places

City of Overland Purchasing Power
Woodson Corridor Retail Sales
Firm, Ripe, and Possible Development Potential

Urban Planning
Existing Land Use
Three Distinct Sub-Areas

Downtown
• Main Street urban character
• More pedestrian scale
• Well-maintained public space

Mid-Corridor (Transition Area)
• Transition area
• Variety of residential character
• Well-maintained sidewalks

North of Page
• Auto-oriented uses
• Well-maintained infrastructure
• Established business owners
New commercial mixed with residential

Variety of housing, maintained public space

Variety of multi-family

Well-maintained infrastructure

Auto-oriented commercial and light industrial uses

Wide access points, lots of pavement
Transportation

Midland to Lackland

• Speeds:
  – 20 MPH Posted/24 MPH Average

• Volumes
  – 7250 vpd on Woodson
  – 9500 vpd on Midland

• Transit:
  – Route 66 N/S; Route 33 E/W

• Parking
  – Everman to Midland heavily parked during events

• Intersections
  – Woodland/Midland; 7 Injury Crashes (2013-2015) and 2 Pedestrian Crashes
  – Signals at Midland and Lackland with Pedestrian Beacon in Downtown.
**Lackland to Flora**

- **Speeds:**
  - 30 MPH Posted/30 MPH Average

- **Volumes**
  - 9500 vpd on Woodson

- **Transit:**
  - Route 66 N/S

- **Intersections**
  - All cross-streets stop-controlled
  - Multiple residential drive-ways
  - No mid-block Pedestrian Crossings

**Flora to Page**

- **Speeds:**
  - 30 MPH Posted/30 MPH Average

- **Volumes**
  - 12,000 vpd Woodson (near Page)
  - 32,000 vpd Page Avenue
  - 4,250 vpd Brown

- **Transit:**
  - Route 66 N/S; Route 94 E/W (Page)

- **Intersections**
  - Page Avenue is a large intersection; 16 Injury Crashes (2013-2015).
  - Multiple commercial drive-ways
  - 2 Bicycle Crashes (Ridge and Minerva)
  - Centennial Greenway south of Page
Environmental Analysis

Environmental Infrastructure

Total Project Boundary Pervious Total = 24.5%

Zone 1 (Midland to Lackland)
83.4% Impervious
16.6% Green Space - Pervious

Zone 2 (Lackland to Flora)
60.9% Impervious
39.1% Green Space - Pervious

Zone 3 (Flora to Page)
81.4% Impervious
18.6% Green Space - Pervious
Zone 1
Downtown Area

Zone 2
Vacant Land

Zone 3
Automotive Focus

Environmental Infrastructure

Lighting Coverage

Downtown Area Light Level Adequate

Dark at Bus Stop & Intersection

Dark in Residential Area
Environmental Infrastructure

Issues
- Limited Green Space/Too much Impervious
- Overhead Utilities
- Limited Street Tree Planting
- Areas Lack Sufficient Night Lighting
- Needs additional bike parking locations
- Sidewalk Obstructions (East Side)
- Lack of Native Plant Material
- Lack of Alternate Energy Sources—Solar & Wind
Survey
Questions
Who will win the NL central this year?

- 88% 1. Cards
- 12% 2. Cubs
- 0% 3. Pirates
- 0% 4. Reds
- 0% 5. Brewers

Where do you live?

- 22% 1. East of Woodson in Overland
- 67% 2. West of Woodson in Overland
- 0% 3. North of Study area in Overland
- 0% 4. South of Page in Overland
- 11% 5. Elsewhere in St. Louis County
- 0% 6. Somewhere else

What is your age?

- 0% 1. 20 or younger
- 22% 2. 21 – 30
- 11% 3. 31 – 40
- 6% 4. 41 – 50
- 17% 5. 51 – 60
- 33% 6. 61 – 70
- 11% 7. 71 or older

Where do you work?

- 11% 1. On Woodson Rd. in the study area
- 11% 2. Elsewhere in Overland
- 22% 3. Elsewhere in St. Louis County
- 11% 4. St. Louis City
- 17% 5. Somewhere else
- 28% 6. I am not currently employed
How do you travel Woodson Rd?
Click all that apply

- 50% Drive
- 22% Walk
- 11% Bike
- 6% Bus
- 11% Run

How safe do you feel driving?

- 50% Very safe
- 39% Usually fine – sometimes not
- 11% OK, but not great
- 0% I need to be unusually attentive
- 0% There are regular issues
- 0% I avoid driving the road
- 0% I would drive more if it were safer

How safe do you feel walking?

- 39% Very safe
- 28% Usually fine – sometimes not
- 17% OK, but not great
- 6% I need to be unusually attentive
- 6% There are regular issues
- 6% I avoid walking on Woodson
- 0% I would walk more if it were safer

How safe do you feel biking?

- 31% Very safe
- 8% Usually fine – sometimes not
- 8% OK, but not great
- 0% I need to be unusually attentive
- 0% There are regular issues
- 23% I avoid biking on Woodson
- 31% I would bike if it were safer
Would you agree that there are three basic areas of our study: “Downtown”, “Commercial near Page”, and a “Residential area in between”?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>83%</td>
<td>1. Yes</td>
</tr>
<tr>
<td>17%</td>
<td>2. Maybe with some adjustments</td>
</tr>
<tr>
<td>0%</td>
<td>3. No, let’s talk.</td>
</tr>
</tbody>
</table>

Do you frequent the businesses in the study area? (click all that apply)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>11%</td>
<td>1. Yes, in the “downtown” area</td>
</tr>
<tr>
<td>17%</td>
<td>2. Yes, in the area just north of Page</td>
</tr>
<tr>
<td>28%</td>
<td>3. Yes, for basic necessities</td>
</tr>
<tr>
<td>33%</td>
<td>4. Yes, for dining and entertainment</td>
</tr>
<tr>
<td>11%</td>
<td>5. Not really (less than once monthly)</td>
</tr>
</tbody>
</table>

What additional uses would you like to see on Woodson Road?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>1. Coffee shop/cafè</td>
</tr>
<tr>
<td>5%</td>
<td>2. Medical services</td>
</tr>
<tr>
<td>0%</td>
<td>3. Grocery</td>
</tr>
<tr>
<td>0%</td>
<td>4. Small office</td>
</tr>
<tr>
<td>16%</td>
<td>5. Dining</td>
</tr>
<tr>
<td>11%</td>
<td>6. Pub</td>
</tr>
<tr>
<td>42%</td>
<td>7. Boutique shops</td>
</tr>
<tr>
<td>21%</td>
<td>8. Skilled labor shops</td>
</tr>
<tr>
<td>0%</td>
<td>9. Nothing new, keep it the same</td>
</tr>
</tbody>
</table>

Is Parking Adequate in the study area?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>37%</td>
<td>1. Yes, very convenient</td>
</tr>
<tr>
<td>47%</td>
<td>2. OK, not usually a problem</td>
</tr>
<tr>
<td>16%</td>
<td>3. Generally inconvenient</td>
</tr>
<tr>
<td>0%</td>
<td>4. Always a problem</td>
</tr>
<tr>
<td>Percentage</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>6%</td>
<td>2. Active and well tended</td>
</tr>
<tr>
<td>17%</td>
<td>3. A bit neglected in areas</td>
</tr>
<tr>
<td>39%</td>
<td>4. Generally a little “tired”</td>
</tr>
<tr>
<td>39%</td>
<td>5. In need of some sprucing up</td>
</tr>
<tr>
<td>0%</td>
<td>1. Charming</td>
</tr>
</tbody>
</table>
**Woodson Road**

**Schedule:**

- **Preparation time**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>9:00 A.M.</td>
<td>Project Team Meeting</td>
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<tr>
<td>9:30 A.M.</td>
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<td>Design Team Working Session (Open to the Public)</td>
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<td>1:00 P.M.</td>
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<td></td>
</tr>
<tr>
<td>2:00 P.M.</td>
<td>Individual and Focus Group Discussions (Open to the Public)</td>
<td>Group Discussion (Open to the Public)</td>
<td>Group Discussion (Open to the Public)</td>
<td>Project Team Meeting</td>
</tr>
<tr>
<td>3:00 P.M.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:00 P.M.</td>
<td>Project Team Meeting</td>
<td>Design Team Working Session (Open to the Public)</td>
<td>Design Team Working Session and Follow-Up Interviews (Open to the Public)</td>
<td></td>
</tr>
<tr>
<td>5:00 P.M.</td>
<td>Public Kick-Off Meeting</td>
<td>Public Feedback Session</td>
<td>No Evening Session</td>
<td>Public Wrap Up and Next Steps Session</td>
</tr>
<tr>
<td>5:30 P.M.</td>
<td></td>
<td></td>
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<tr>
<td>6:00 P.M.</td>
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</tr>
<tr>
<td>9:00 P.M.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

- The end report will be finished this June
“There is more to life than increasing its speed.”

Ghandi

What we’ve heard:

- The business community wants to reinforce the existing “districts”
  *Too many empty buildings*
- People want family and household retail and dining options
- There is a need for housing and services to help residents “age in place”
- Downtown needs some transformation
- Vehicles behave
What we’ve heard:

• There is enough parking, though some of it is not convenient
• The appearance of Woodson needs some improvement – signage, landscaping, lighting, uninviting to walk
• There are some flooding issues
• Beautification improvements would need a maintenance strategy going in
• Many of your priorities align

What we’ve heard:

• Overland needs a “Destination” or an “Anchor”
• Woodson Road needs better local and regional connectivity
• Woodson Road needs the right size development sites
• Zoning should support the type of development Overland wants
What we’ve heard:

• Additional nearby bike facilities are planned
• Page bus line is used
• People do walk and bike the corridor
• People comfortable walking and driving – biking is split
Woodson Road
Roadway Segments

Market Planning
Population by Age Groups:
Overland is “Younger” than St. Louis County

MEDIAN AGE: Overland 38.7 St. Louis County 40.8

Tapestry Population Groups: Overland & County

67 Tapestry Groups
6 in Overland
38 in St. Louis County

Attract more to Overland?
### Tapestry Population Groups: City of Overland

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Living</td>
<td>53%</td>
<td>8,451</td>
</tr>
<tr>
<td>Rustbelt Traditions</td>
<td>38%</td>
<td>5,968</td>
</tr>
<tr>
<td>Parks and Rec</td>
<td></td>
<td>1,061</td>
</tr>
<tr>
<td>Family Foundations</td>
<td></td>
<td>187</td>
</tr>
<tr>
<td>Front Porches</td>
<td></td>
<td>184</td>
</tr>
<tr>
<td>In Style</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>
Household Income Density 2014

What Could Woodson Road Look Like?

BEFORE

AFTER?
What Could Woodson Road Look Like?

What Could Woodson Road Look Like?
What Could Woodson Road Look Like?

Kirkwood Plaza

Old Webster

What Could Woodson Road Look Like?

Artists Live-Work Places

Murals
What Could Woodson Road Look Like?

Higher Density Housing

Senior Apartments and Villas

Village at MacKenzie Place

AFFTON
Identity and Branding

Environmental Infrastructure
Main points:

- Flooding – Impervious pavement
- Lighting
- Tree canopy / landscaping
- Heat Island Effect
- Overhead utilities

Midland and Woodson Intersection
Downtown Segment Ideas
Siting Strategies:

- Ped / urban and “auto oriented”
- Parking
- Ordinance details

Bumpouts
South Grand – Grand & Humphrey
City of St. Louis, MO
Neighborhood Segment Ideas
Shared Use Path

Route K
O’Fallon, MO

Speed Table

NAACTO
Trail Crossing
Centennial Greenway
Forsyth and Skinker, City of St. Louis

Trail Crossing
Grant’s Trail – Great Rivers Greenway
Gravois Road, Grantwood Village, St. Louis County
Is this your first time meeting us?

1. No, I was here yesterday [100%]
2. No, I was at a focus group meeting today [0%]
3. Yes, this is the first time I’ve met you [0%]
4. Who are you again? [0%]

Preserve the Downtown Character

1. Very Important [100%]
2. Somewhat Important [0%]
3. Neutral [0%]
4. Somewhat Not Important [0%]
5. Not At All Important [0%]

Knowing what you know now, which intersection do you prefer?

1. Roundabout [0%]
2. Oval Intersection [50%]
3. Traffic Signal [50%]
4. Something Else [0%]

How important is it to bury the power lines in the Downtown area?

1. Very [100%]
2. Somewhat [0%]
3. Not [0%]
<table>
<thead>
<tr>
<th>What is your feeling on additional bumpouts in Downtown area?</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% 1. Love it</td>
</tr>
<tr>
<td>0% 2. Like it</td>
</tr>
<tr>
<td>0% 3. Neutral</td>
</tr>
<tr>
<td>0% 4. Dislike</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How do you feel about higher density, market-rate housing on Woodson Road?</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% 1. Yes, we need more density</td>
</tr>
<tr>
<td>50% 2. Yes, but depends on the details</td>
</tr>
<tr>
<td>0% 3. No, don’t need more multi-family</td>
</tr>
<tr>
<td>0% 4. Not sure</td>
</tr>
</tbody>
</table>

Do you support pedestrian improvements at Lackland?

| 50% 1. Yes, absolutely | How often would you/family use a shared-use path on the west side of Woodson? |
| 50% 2. Yes, but don’t significantly impact traffic | 0% 1. All the time |
| 0% 3. Yes, but don’t impact traffic at all | 50% 2. Often |
| 0% 4. No, not needed | 50% 3. Once in a while |

<table>
<thead>
<tr>
<th>How often would you/family use a shared-use path on the west side of Woodson?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% 1. All the time</td>
</tr>
<tr>
<td>50% 2. Often</td>
</tr>
<tr>
<td>50% 3. Once in a while</td>
</tr>
<tr>
<td>0% 4. Never</td>
</tr>
<tr>
<td>How do you feel about senior housing on Woodson Road?</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>100%  1. Yes, we need senior housing</td>
</tr>
<tr>
<td>0%  2. Yes, but depends on the product</td>
</tr>
<tr>
<td>0%  3. Yes, but not on Woodson Road</td>
</tr>
<tr>
<td>0%  4. No, we don’t need it</td>
</tr>
<tr>
<td>0%  5. Not sure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How important is it to do enhancements to the Flora intersection?</th>
<th>Which intersection type do you prefer at Brown Road?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%  1. Very important</td>
<td>0%  1. Traffic signal</td>
</tr>
<tr>
<td>0%  2. Somewhat important</td>
<td>100% 2. Roundabout</td>
</tr>
<tr>
<td>0%  3. Neutral</td>
<td>0%  3. Don’t know</td>
</tr>
<tr>
<td>0%  4. Somewhat not important</td>
<td></td>
</tr>
<tr>
<td>0%  5. Not at all important</td>
<td></td>
</tr>
</tbody>
</table>
Woodson Road

Schedule:

- Preparation time

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</table>

- The end report will be finished this June
What we’ve heard:

- The business community wants to reinforce the existing “districts”
  *Too many empty buildings*
- People want family and household retail and dining options
- There is a need for housing and services to help residents “age in place”
- Downtown needs some transformation
- Vehicles behave
What we’ve heard:

- There is enough parking, though some of it is not convenient
- The appearance of Woodson needs some improvement – signage, landscaping, lighting, uninviting to walk
- There are some flooding issues
- Beautification improvements would need a maintenance strategy going in
- Many of your priorities align

What we’ve heard:

- Overland needs a “Destination” or an “Anchor”
- Woodson Road needs better local and regional bike/ped connectivity
- Woodson Road needs the right size development sites
- Zoning should support the type of development Overland wants
What we’ve heard:

- Additional nearby bike facilities are planned
- Page bus line is heavily used
- High bike traffic on Midland
- People do walk and bike the corridor
- People comfortable walking and driving – biking is split
- Unsightly overhead utility

Woodson Road strengths:

- Great location within the region
- Access to many jobs
- Strong community with active leadership
- Quality affordable housing stock
Woodson Road strengths:

- Ample parking
- Well maintained properties
- Street grid – walkability / alternate routes

Woodson Road challenges:

- Storm water flooding issues
- An “unfocused” downtown – disrepair / vacancy
- Midland & Page intersection safety
- Failed landscaping efforts
- Pedestrian connection gaps
- Some current zoning issues
- Bike-ability
- # 66 bus line service
- Overhead Utilities
Things to build on:

- Bike / Pedestrian network
- Active local groups (OBA, beautification, etc.)
- Successful events (farmer’s market / block party)
- Strong community character
- Artisan businesses
- Zoning revision
- Local buying power

Centennial Greenway Plan
Woodson Connector

Survey Questions
Market Context

City of Overland Population 1940-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>2,934</td>
</tr>
<tr>
<td>1950</td>
<td>11,566</td>
</tr>
<tr>
<td>1960</td>
<td>22,763</td>
</tr>
<tr>
<td>1970</td>
<td>24,819</td>
</tr>
<tr>
<td>1980</td>
<td>19,620</td>
</tr>
<tr>
<td>1990</td>
<td>17,987</td>
</tr>
<tr>
<td>2000</td>
<td>16,838</td>
</tr>
<tr>
<td>2010</td>
<td>16,062</td>
</tr>
<tr>
<td>EST. 2014</td>
<td>15,985</td>
</tr>
</tbody>
</table>
Household Income Density 2014

City of Overland St. Louis County

2015 Per Capita Income

$ 22K

$ 36K

Population by Age Groups:
Overland is “Younger” than St. Louis County

MEDIAN AGE: Overland 38.7 St. Louis County 40.8
Number of Residents 65 and Older
City of Overland, 2010 to 2020

2,036 2,190 2,512

2010 2015 2020

Tapestry Population Groups: Overland & County

67 Tapestry Groups
6 in Overland
38 in St. Louis County

Attract more to Overland?
Tapestry Population Groups: City of Overland

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</tr>
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</table>

53% of the population is Traditional Living, which includes 2,369,000 households, an average household size of 2.50, a median age of 34.8, and a median household income of $37,000.

38% of the population is Rustbelt Traditions, which includes 2,685,000 households, an average household size of 2.46, a median age of 38.4, and a median household income of $49,000.
Almost 7,000 people leave Overland each day for work. But over 10,000 come into Overland each day. That’s 10,000 people familiar with Overland plus all the residents!

Earnings of Workers: $40,000/Year or More

- 24% of workers staying in Overland each day
- 32% of workers leaving Overland each day.
- 41% of workers coming into Overland each day.
  - Good-paying jobs are in Overland.

- OUTSIDERS WHO “KNOW” OVERLAND HAVE MORE SPENDING POWER.
  - Let’s encourage them to come back and spend money.
Secret to Success: GET ORGANIZED

- Join Forces – several active local groups
- Downtown Development District
  - Branding
  - Common marketing
  - Political advocacy
  - Fund raising
  - Tenanting strategy

Models for Getting Organized

- **Special Business District (SBD):** Maplewood
  - City Staff: community development director
  - Some self funding (assessments) not to pay “staff”

- **Advisory Commission:** Kirkwood
  - City Staff: exec dir, event coord, farmers market

- **Community Improvement District (CID)**
  - South Grand, The Grove
    - Independent Staff: exec dir.
    - Self-Funding (assessments)

- **Historic Main Street Program and Training**
  - [www.MoMainStreet.org](http://www.MoMainStreet.org)
Self-Assessment Example: South Grand CID

- 25¢ per square foot of lot per year
- 40¢ per square foot of first floor
- 26¢ per square foot of upper floors

$225,000

Plus... 
...half-cent sales tax
...grants

A bit steep?

Self-Assessment Example: Downtown Overland

PRESENT OCCUPANCY

- 10¢ per square foot of lot per year
- 15¢ per square foot of first floor
- 8¢ per square foot of upper floors

$65,000

BUILD-OUT

- 10¢ per SF lot
- 15¢ per SF first floor
- 8¢ per SF upper floors

$75,000
What Could Woodson Road Look Like?

BEFORE

AFTER?

What Could Woodson Road Look Like?
What Could Woodson Road Look Like?

Kirkwood Plaza

Old Webster
What Could Woodson Road Look Like?

Artists Live-Work Places
Murals

Higher Density Housing
What Could Woodson Road Look Like?

Senior Apartments and Villas

Village at MacKenzie Place
AFFTON

Identity and Branding
Woodson Road

Roadway Segments

Midland and Woodson Intersection
Key Issues:
- Land Use / Development
- Peds and Bikes
- Gateway Treatment
- Traffic Flow

Downtown Segment Ideas
Bumpouts
South Grand – Grand & Humphrey
City of St. Louis, MO
Event Street Closures:

Siting Strategies:

- Ped / urban and “auto oriented”
- Parking
- Ordinance details
Downtown District?

Survey Questions
Neighborhood Segment Ideas

Green Space / Trees

Trail Connector
Existing Conditions
Add Sharrows

Shared Use Path with Center Turn Lane

Shared Use Path without Center Turn Lanes

Striped Bike Lanes

Shared Use Path
Speed Table at Flora

Speed Table
Intersection at Brown Rd.
Page Intersection

Survey Questions
Where does the $ come from?

- District?
- Transportation funding
- Grants
- Possible partnerships (such as GRG, MoDOT, County)
- Local
Survey
Questions
### What’s your favorite St. Patrick’s Day Fare?

<table>
<thead>
<tr>
<th>Choice</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corned beef and cabbage</td>
<td>64%</td>
</tr>
<tr>
<td>Green eggs</td>
<td>0%</td>
</tr>
<tr>
<td>Green Ham</td>
<td>0%</td>
</tr>
<tr>
<td>Green Beer</td>
<td>27%</td>
</tr>
<tr>
<td>I’m not Irish, Can’t stand any of it</td>
<td>9%</td>
</tr>
</tbody>
</table>

### Would you like streetscape plantings?

<table>
<thead>
<tr>
<th>Choice</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, let’s try this again</td>
<td>33%</td>
</tr>
<tr>
<td>Yes, only if there’s a maintenance strategy</td>
<td>63%</td>
</tr>
<tr>
<td>No, don’t bother</td>
<td>4%</td>
</tr>
</tbody>
</table>

### How significant is the flooding?

<table>
<thead>
<tr>
<th>Choice</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not a problem, more of an annoyance</td>
<td>18%</td>
</tr>
<tr>
<td>Occasionally a problem</td>
<td>55%</td>
</tr>
<tr>
<td>A regular problem, but not too serious</td>
<td>14%</td>
</tr>
<tr>
<td>Significant – needs to be addressed</td>
<td>14%</td>
</tr>
</tbody>
</table>

Woodson Corridor questions
Do you approve of the Bike/Ped Connector?

83%
1. Yes, it’s a great idea

9%
2. I think it’s OK, not great, not bad

9%
3. I don’t really like it, but suppose it’s fine

0%
4. I think it’s a bad idea

Should the overhead utilities be buried or moved behind the buildings?

60%
1. Yes, they detract from the character of the street

40%
2. Maybe – it depends on the cost

0%
3. They would be fine where they are if the poles and wires were tidied up

0%
4. No, they are not that important

Should future development be at the sidewalk?

88%
1. Yes, the “main street” feel is important

8%
2. Perhaps, it’s not really important

0%
3. Let new front parked developments in

4%
4. Tear down the old buildings, build new front parked where we can
Would you be in favor of more large events that close Woodson Rd. from Lackland to Midland?

1. Sure, monthly would be great
2. Yes, several times a year
3. No more than twice a year
4. Keep it once a year
5. Leave it the way it is
6. I don’t really care

12% 77% 12% 0% 0% 0%

Downtown area

Would a bike trailhead at the City Pavilion be a good idea?

1. Yes, that makes sense
2. No, that doesn’t seem necessary
3. I don’t really care

92% 8% 0%

Downtown area

Would a district be considered?

1. Yes, this is a good early step
2. Maybe eventually. Do other things first
3. No
4. I don’t really care

92% 8% 0% 0% 0%

Downtown area

Should shared back lot parking with improved access work?

1. No, leave it the way it is
2. Yes, this would work well
3. I don’t really care

0% 100% 0%

Downtown area

Would you be in favor of more large events that close Woodson Rd. from Lackland to Midland?

1. Sure, monthly would be great
2. Yes, several times a year
3. No more than twice a year
4. Keep it once a year
5. Leave it the way it is
6. I don’t really care

12% 77% 12% 0% 0% 0%

Downtown area

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2. No, that doesn’t seem necessary
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92% 8% 0%

Downtown area

Would a district be considered?

1. Yes, this is a good early step
2. Maybe eventually. Do other things first
3. No
4. I don’t really care

92% 8% 0% 0% 0%

Downtown area

Should shared back lot parking with improved access work?

1. No, leave it the way it is
2. Yes, this would work well
3. I don’t really care

0% 100% 0%

Downtown area
Neighborhood area questions

I would like any new development along Woodson to be:

- **10%** 1. Owner occupied housing
- **24%** 2. High quality rental
- **43%** 3. Good senior housing
- **19%** 4. More commercial development
- **5%** 5. Something else
- **0%** 6. I don’t want any new development

Would you like a bike trail connector along Woodson?

- **17%** 1. Yes, shared lane markings are fine
- **17%** 2. Yes, striped bike lanes on both sides of the road (eliminate left turn lane)
- **57%** 3. Yes, as a shared use path on the west side
- **9%** 4. No, not a good idea

Convenience Service area questions
### Should the Brown Rd. intersection be changed?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes, align it with Romaine Ave.</td>
<td>65%</td>
</tr>
<tr>
<td>2. Yes, I like the round-a-bout idea</td>
<td>4%</td>
</tr>
<tr>
<td>3. No, it’s fine the way it is</td>
<td>30%</td>
</tr>
</tbody>
</table>

### Should the stub streets on the east side of Woodson be abandoned?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes, it’s roadway we don’t need</td>
<td>39%</td>
</tr>
<tr>
<td>2. Maybe, depending on a development plan</td>
<td>57%</td>
</tr>
<tr>
<td>3. No, keep them there</td>
<td>0%</td>
</tr>
<tr>
<td>4. I don’t really care</td>
<td>4%</td>
</tr>
</tbody>
</table>

### Should Page be easier to cross?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes, mostly for pedestrians</td>
<td>29%</td>
</tr>
<tr>
<td>2. Yes, both for cyclists and pedestrians</td>
<td>63%</td>
</tr>
<tr>
<td>3. No, it’s fine the way it is</td>
<td>8%</td>
</tr>
</tbody>
</table>

And at the end of the day . . .
What are your top three priorities for the project study area?

(Pick 3)

1. Fix the Midland / Woodson intersection
2. Revitalize downtown
3. The Overland Trail bike connector
4. Fix the storm water drainage
5. Pedestrian connections at the south end
6. Build up the neighborhood middle section
7. Realign the Brown Rd. intersection
MARKET & ECONOMIC DEVELOPMENT WHITE PAPER

GREAT STREETS WOODSON ROAD

OVERLAND, MISSOURI

APRIL 1, 2016

PREPARED FOR

City of Overland, Missouri
East-West Gateway Council of Governments
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DEVELOPMENT STRATEGIES
A CHANGING NATION

National and regional trends in housing construction, demographics, and consumer preferences are keys to understanding what is in store for the future development of the Woodson Road Corridor.

A GROWING NATION, A STABLE REGION

The U.S. population grows roughly ten percent per decade.¹ While that growth is not evenly distributed across America’s communities, demand for housing is persistent as the national population continues to grow. Demand for places of employment (such as office space) and places to provide services (such as retail space) will also continue to grow despite occasional business cycle downturns.

- The United States will reach 400 million people by 2040, up 100 million (33%) from 2005.
- The next 100 million people will require 40 million homes².

But that’s just the net housing need. Many homes will need to be replaced during that time, too. And the demands for different housing products will change as demographics and styles inevitably evolve. There will be increased demand for senior housing, for instance, as well as increased demand for small housing because fewer households will have children, and those who do have children will have fewer of them. Other types of housing may become dysfunctional, less valuable, and perhaps largely vacant.

Such forces presently affect the future of St. Louis County and, potentially, Overland while suggesting opportunities to capture changing markets along Woodson Road.

The population of the St. Louis metropolitan area was estimated to be 2,811,600 in mid-2015.³ This was a 0.8 percent increase (21,560 people) from the 2010 population, or a growth rate only about one-fifth that of the nation. This relatively sluggish regional growth is an important, and possibly limiting, factor in projecting potential growth and change in Overland and along Woodson Road.

¹ Though the pace is a little slower at present. Recently released 2015 population estimates show that the country added 3.9 percent more residents between 2010 and 2015, suggesting that the decade of 2010 to 2010 might add only about eight percent more population.
Of that metropolitan growth, only 20 percent occurred in St. Louis County, which added just over 4,100 residents between 2010 and 2015, for a growth rate of 0.4 percent, or half that of the metro areas as a whole. Some of this sluggish growth in St. Louis County is attributable to the perceived “build-out” of the county wherein most available land has already been developed. But this ignores areas of disinvestment where redevelopment can take place—indeed, does take place quite often. In short, there is room for growth in the county as a whole and even within Overland and along the Woodson Road corridor.

In many ways, therefore, the growth potential of Overland is tied to the growth of St. Louis County which, in turn, is not growing very much at all. This has been a trend for a few decades. In all likelihood, therefore, Overland and Woodson Road are going to have to identify other ways to increase economic and population growth such as, perhaps, creating a business and residential climate that is more appealing than in the past in order to attract growth that might otherwise go other places in the county and region.

**SMALLER HOUSEHOLDS MEAN SMALLER HOMES**

The national population is not only growing but it is shifting demographically, which implies that the types of housing offered will have to be altered to meet changing needs. For instance, 45 percent of American households had children in 1970, but this share will be reduced to 27 percent by 2030. Moreover, 14 percent of all households were single persons in 1970, but this more than doubled to 31 percent in 2000, and is projected to increase to 34 percent by 2030.

Smaller and fewer families are already increasing the demand for attached and smaller lot housing, while there is already an oversupply of large lot housing nationally. By 2025, 17 million new attached homes will be needed in the U.S., and 18.5 million new small lot homes will be needed. Meanwhile, there will be an oversupply of 1.5 million large lot single family homes by 2025⁴.

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CATERING TO AN AGING POPULATION AND THE MILLENIALS

Another important demographic trend that creates a need for specific types of housing is the aging population. In the United States, 41 million of the next 100 million will be over the age of 65. The graph to the right demonstrates the growing 65+ population.

Older adults are often not able to live alone in single family, detached homes, or they prefer not to because of frailties or a desire not to live in large homes any longer. Multi-family housing stock within walking distance to retail and commercial amenities caters to an aging population. Housing located close to viable public transit is also important to older adults.

Yet, while the huge cohort of baby boomers (born 1946-1964) is aging into new and smaller housing choices, an even larger cohort is presently, and aggressively, entering its child-rearing age. But these Millennial households are choosing to have fewer children than did the boomers and are far more likely to prefer urban, walkable, neighborhoods requiring less use of automobiles and greater use of alternative forms of transport—transit, bikes, shared cars, even walking. This is partly what is driving the increase in “excess” large lot homes in the nation.
OVERLAND AND ST. LOUIS COUNTY

POPULATION TRENDS

Overland is one of some 91 municipalities in St. Louis County. As such it both competes with and, of necessity, cooperates with its neighboring cities. Incorporated in 1939, Overland shared in St. Louis County’s rapid suburban growth until about 1970 when the city reached its largest population of more than 24,800. Since then, Overland has lost about a third of its population, though most of that was in the 1970s when the entire St. Louis metropolitan area actually lost population. The metro area has grown since, but much more slowly than the U.S. as a whole. St. Louis County, meanwhile, grew to about one million residents by 1980 and has “leveled off” since then.

HOUSEHOLD INCOME

Per capita income in Overland is about two-thirds that of the entirety of St. Louis County, but Overland’s “income density” is relatively strong. The map to the right depicts household income on a per-square-mile basis as determined at the Census block group geography. The purpose is to distinguish areas of high household income (e.g., central St. Louis County) from those where incomes might be lower but the concentration of aggregate incomes is higher. Overland may have lower individual in-

---

Note, for instance, that the high-income central corridor west of I-170 is depicted here as rather middling. That’s a reflection of lower density housing even though each house has very high incomes. East of I-170 is also wealthy, but also much more densely developed. The south side of the city of St. Louis also shows strong income density even though individual incomes are not very high. Retailers, of course, prefer locations near strong income density to take advantage of the nearby buying power.
comes, but the number of households in close proximity indicate that Overland has above average “buying power.”

This relative strength of income density and buying power is already reflected in the Overland area to a notable degree by the amount of retailing that has been developed, particularly where Woodson Road, Page Avenue, and I-170 meet. The relatively new Walgreen’s store and the Dobbs Auto Service at Woodson and Lackland Roads is also an indication of the surrounding buying power. These indicators suggest that more retailing—and perhaps other personal services businesses—can be attracted to the Woodson corridor to take advantage of the local income density.

Age of the Population

Overland is generally younger than the rest of St. Louis County. The city’s median age is two years less than the county. There is a higher proportion of young children (ages 0 to 9) in Overland than in the county. And working age adults (25-64) have a higher percentage representation in the city than in the county. Moreover, there is a lower percentage of seniors (over 65) in Overland than in St. Louis County.

This has implications for attracting more and different growth that can support revitalization of Woodson Road. While not studied deeply for this report, the Ritnour School District may have a solid reputation for attracting young families. Housing for many occupations is affordable in overland, thus supporting a high share of working age adults. But there may be too few housing options for retired people within Overland, so many of them leave the city for “senior housing” in other places.

Demographic Segmentation

Market researchers often segment the American population into groups that have common characteristics. One such approach is called “Tapestry” segmentation by the independent socio-economic data vendor Esri.
Esri divides American households into 67 segments which are useful in better understanding local community characteristics in the context of larger geographic areas.

No state, county, or city in the U.S. contains all 67 groups. Some of them are defined in terms of geographic location, like “Pacific Heights” or “Rustbelt Traditions.” The St. Louis area is certainly not closely associated with the Pacific Ocean, nor is California much associated with the industrial rustbelt, so many of the population segments are concentrated in particular areas.

Of the 67 Esri Tapestry segments, the city of Overland is home to six, as illustrated on the following graph. Actually, just over nine out of ten Overland residents are within just two of these groups—Traditional Living and Rustbelt Traditions. More details on each of these two groups are found in the Appendix to this report.
Meanwhile, St. Louis County encompasses 38 of the 67 Tapestry groups, a testament to the demographic diversity of the county.\(^7\)

With that many groups not represented, or poorly represented, in Overland, there may be opportunities to adapt the city, especially along Woodson Road, to attract and support several additional groups that are already present in the county. This report does not delve into which groups would be most appropriate in an Overland/Woodson Road context, but future market research could identify prospects for a marketing and housing development campaign.

**EMPLOYMENT AND LABOR FORCE**

The U.S. Census Bureau reported that just over 11,000 people were employed in the city of Overland in 2014, an increase of 2.2 percent from 10,800 in 2002. Meanwhile, St. Louis County, as a whole, lost jobs between 2002 and 2014 from 557,100 to 564,150.\(^8\)

In short, Overland has been a stalwart in both job retention and growth over the past decade or more.

The Census job data for Overland also reveal that more people commute into Overland for jobs than commute out of Overland for jobs elsewhere in the metropolitan area. In 2014, 6,881

---

\(^6\) More extensive descriptions of these and all other Esri Tapestry segments can be found at http://www.esri.com/library/whitepapers/pdfs/community-tapestry.pdf.

\(^7\) By comparison, New York City (population 8.43 million) has 44 Tapestry groups.

\(^8\) Source: http://onthemap.ces.census.gov/. The employment figures in this data source, however, are low. In fact, according to the much more comprehensive Regional Economic Information System (REIS) of the U.S. Bureau of Economic Analysis (housed in the Department of Commerce, just like the Census Bureau), St. Louis County had 764,100 jobs in 2014 and 769,100 in 2002. The latter database is available only for counties and includes farm jobs and sole proprietor jobs that are not captured by the “on the map” Census data. Thus, there may be more jobs in Overland than shown here. Still, the trend in the county has been downward, while the trend in Overland has been upward.
Overland residents commuted to jobs outside the city while just 345 residents remained in the city for their daily work. Meanwhile, 10,688 people commuted from elsewhere into Overland for work. This indicates that Overland is not only a crucial job center for St. Louis County, but that there are 10,688 people who are at least somewhat familiar with Overland who might be attracted to live in Overland if appropriate housing and amenities could be created or improved. In other words, there is a sizable market segment of prospective residents already at Overland’s doorstep.

These in-commuters also tend to be paid more than Overland residents. The Census Bureau breaks up the commuting data into three broad annual wage and salary ranges: Under $15,000, between $15,000 and $40,000, and over $40,000. In 2014, 40.6 percent of the 10,688 in-commuters were paid more than $40,000. But only 31.5 percent of the 6,881 out-commuters were paid more than $40,000 while the 24.1 percent of the 345 people who commute internally in Overland were paid $40,000 or more.

Thus, in addition to a “ready market” of 10,688 people commuting into Overland each day, they are also collectively paid substantially more than current Overland residents. Improving the housing stock in Overland to higher overall values and amenities might be quite appealing to at least a few of these in-commuters who would, in turn, increase the income density of the city.
OPPORTUNITIES FOR THE WOODSON ROAD CORRIDOR

In light of the broader market forces summarized above, parts of the Woodson Road study corridor are already positioned to capture more growth while other parts can be adapted to attract growth based on changing lifestyles, evolving demographic groups, and special economic strengths.

LOCATION ADVANTAGES

One of the corridor’s principle economic advantages is that it is in St. Louis County. While the county has had its share of struggles in recent years as a maturing urban county, including population stability (despite room for more growth) and job decreases, it is still the largest county-based economy for hundreds of miles. Within Missouri, the three largest county economies, in order of job counts, are St. Louis County, Jackson County (Kansas City), and the City of St. Louis.9 Benefiting Overland is that St. Louis County and City are now linked for economic development purposes (the St. Louis Economic Development Partnership) in order to increase the metro area’s competitive positioning.

Also benefiting the location of Overland and Woodson Road is I-170 with interstate highway access from Page Avenue to Lambert Airport or to the county seat in Clayton, each about ten minutes away. This locational advantage is evident in the corporate offices and industrial facilities in the Page/I-170 vicinity as well as the major retailers who are located in the area.

Woodson Road also has a very special location advantage because it has a “genuine downtown” at the northern end of the study area between Lackland Road and Midland Boulevard. Too few St. Louis County municipalities can claim to have a downtown-like setting that helps to give the community a unique identification. Granted, Overland needs to spruce up its downtown, but the architectural and functional characteristics of downtown Overland are well established. And there are good models within St. Louis County to learn from, such as Ferguson, Maplewood, Kirkwood, and even University City’s Loop.

REAL ESTATE MARKET CONDITIONS

The Woodson Road commercial corridor contains a variety of retail, office, industrial, and residential uses. Most buildings are relatively old. The average building age is more than 50 years, and many require updating to remain not only competitive but also functional for a 21st Century suburban economy. Still, there has been substantial investment in recent years in automobile-oriented businesses, both near and at Page Avenue and

---

9 In 2014, according to the U.S. Bureau of Economic Analysis, Missouri had 3,062,000 jobs. St. Louis County had 764,100 (21.2%), Jackson County had 449,900 (12.5%), and the city of St. Louis had 276,750 (7.7%). Almost three out of ten Missouri jobs are found in St. Louis County and City.
at Lackland Road. While these investments have not been rehabs or renovations of existing structures, for the most part, they provide ample evidence that the business investment climate is improving along Woodson Road.

According to Costar, an independent source of local real estate values, rents, and transactions, the Woodson Road corridor absorbed over 9,900 square feet of retail space in 2015 alone and another 1,700 square feet of office space. Rentable building area (RBA) in the corridor totals over 150,000 square feet for retailing, over 84,000 square feet for office space, and almost 40,000 square feet of industrial or flex-space buildings. Most of the latter uses tend to be small machine shops.

While just a glancing knowledge of Woodson Road indicates many vacant and underutilized buildings, the data to the right suggest high occupancy rates. This is because Costar tracks only those buildings that are actively marketed and that are relatively large. So the occupancy rates can be misleading. Moreover, at least two former drive-thru banks in the corridor are now occupied by churches (though one seems to be back on the market and may not be in use as a church at present). These buildings would be ignored by Costar because they are no longer commercial operations and the buildings appear to be occupied, even though the occupants probably are not the highest and best uses in this corridor.

On another hand, they may be the highest and best uses in light of average lease rates. While conditions appear to be improving due to positive absorption figures for retail and office space in 2015, average lease rates (expressed here as dollars per square foot per year) are generally not sufficient to enable necessary investments to keep buildings from deteriorating. In markets such as Woodson Road, profitable lease rates for retail and office spaces that include investment in the buildings themselves (roof upgrades, HVAC upgrades, and other crucial maintenance) would be a minimum of about $12.50 per square foot per year. It also means that higher quality retail or office products cannot be delivered to the market without the support of some subsidy or incentive.

### Existing Retail Conditions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total RBA (SF)</td>
<td>152,156</td>
</tr>
<tr>
<td>Current Average Occupancy</td>
<td>95%</td>
</tr>
<tr>
<td>Average Lease Rate (Gross)</td>
<td>$10.34</td>
</tr>
<tr>
<td>Average Building Age (Years)</td>
<td>54</td>
</tr>
<tr>
<td>2015 Absorption (SF)</td>
<td>9,935</td>
</tr>
</tbody>
</table>

### Existing Office Conditions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total RBA (SF)</td>
<td>84,295</td>
</tr>
<tr>
<td>Current Average Occupancy</td>
<td>100%</td>
</tr>
<tr>
<td>Average Lease Rate (Gross)</td>
<td>$10.61</td>
</tr>
<tr>
<td>Average Building Age (Years)</td>
<td>63</td>
</tr>
<tr>
<td>2015 Absorption (SF)</td>
<td>1,700</td>
</tr>
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</table>

### Existing Industrial/Flex Conditions

<p>| | |</p>
<table>
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<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total RBA (SF)</td>
<td>39,829</td>
</tr>
<tr>
<td>Current Average Occupancy</td>
<td>83%</td>
</tr>
<tr>
<td>Average Lease Rate (Gross)</td>
<td>$3.00</td>
</tr>
<tr>
<td>Average Building Age (Years)</td>
<td>58</td>
</tr>
<tr>
<td>2015 Absorption (SF)</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Costar 2016
Exceptions to this “rule” can be found with major brands that have recently located in the corridor. Most notable at Lackland Road are Walgreen’s and Dobbs. Given background corporate resources and high quality brand identity, such franchises are able to capitalize on good locations before smaller developers and property owners can do so. Better news is, of course, that these brand names are likely helping to push up the rent potentials in the corridor as more customers patronize them. Other Woodson Road interests need to find ways to capitalize on this improving market position, a topic covered later in this report.

An important challenge along Woodson Road, therefore, is to find ways to leverage more investment, even with public sector support in some manner, in order to increase the pace at which private reinvestment will happen.

**PRELIMINARY SITE REINVESTMENT CONCENTRATIONS**

Using the Costar database as a start and combining that with a visual inspection of the properties in the corridor study area and an evaluation of property tax records, each land parcel was evaluated as to its relative potential for development or redevelopment. The map to the right illustrates three classifications.

1. **Red** properties indicate those that do not need significant reinvestment at present. These represent stable or newly constructed businesses and other purposes. Still, a major goal of the Great Streets plan should be to support these “firm” properties with appropriate public and private investments that help to improve the their real estate value.
2. Green properties, conversely, are considered ripe for redevelopment. One indicator of this classification is that the market value of the improvements on some sites is often less than the value of the land, a factor which is often driven by underutilization or building vacancy. Fully functioning buildings generate positive cash flows and, in turn, higher values. Buildings that do not achieve higher values are either occupied by poor businesses or they seem not to be suited for contemporary uses. In either case, the best solution might actually be site clearance in favor of a more functional building.

Razing of structures, however, has to be balanced against their architectural and historical value in the community. This is of particular concern in the downtown Overland area. Yes, newer buildings might be more functional and profitable, but a major contributing factor to the special identity of downtown is the architectural styles of the buildings. Rejuvenating downtowns, therefore, often require quite different approaches than simple “market-based solutions” including more public or philanthropic intervention to save the structures and to find specialty users/occupants.

3. In between the red and the green sites are the yellow properties. In some ways, these are stable and are not substantially contributing to negative perceptions of the corridor. In other ways, they are not being utilized to their fullest potential. They are tempting locations for public intervention in order to leverage the private market because yellow sites typically require less costly approaches while increasing the quality of a corridor to attract private investment on other properties. But such public intervention might not still be enough to attract sufficient interest in the green properties.

A typical public reinvestment strategy, therefore, is to take over (purchase) certain of the green properties in order to stem further market-based deterioration, and then offer incentives to other property owners and businesses as partners in renovations and occupancy. This should have the effect of reversing negative trends in certain areas while encouraging private market responses in, especially, the yellow properties which should not require as many financial resources. (Depending on the robustness of the re-emerging markets, some current green properties could turn yellow, thus requiring less or no public intervention.) In turn, these public and private investments help to support the red properties, where no intervention is yet needed, so that they do not become yellow or green over time.
### Retail Buying Power vs. Retail Sales

Given income density of the residents of Overland (i.e., excluding the incomes and buying power of people employed in Overland), Woodson Road captures relatively little of that buying power, as shown on the accompanying graph. For instance, Overland residents collectively spend almost $8.4 million per year in full service restaurants. But Woodson Road captures not quite $1.4 million in full service restaurant sales, or just 16 percent of citywide buying power. Limited service restaurants on Woodson Road do even more poorly, capturing only 14 percent of the city’s spending, while drinking places—which are not uncommon in Overland—generate only 7 percent of the city’s sales along Woodson Road.

Health and personal care purchases, on another hand, do fairly well along Woodson Road, capturing over half (58 percent) of all such sales in the city. Building and hardware sales are also fairly strong in the Woodson corridor at 30 percent of citywide sales, given the presence of Home Depot in the city.

Overall, however, the Woodson Road corridor from Page to Midland generates retail sales equivalent to just 13.6 percent of the purchasing power of Overland residents. This suggests some important opportunities, especially in more specialized businesses, where Woodson Road might distinguish itself. These include a wide range of eating and drinking establishments (can Woodson Road attract up-and-coming restaurateurs in something of an incubator climate?) and specialized approaches to clothing, sports, hobby, and related stores. Specialized stores often distinguish themselves with unique products and outstanding personal service, and

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10 Of course, keep in mind that the Woodson Road study corridor is narrowly defined with a stopping point at Page Avenue. Immediately south of Page and to the east, of course, is a large amount of retailing which might be said to also be part of the study corridor. It is likely, therefore, that an eventual marketing campaign to increase sales within the study corridor would focus on the downtown area (Lackland to Midland) while the southern end of the corridor can fend for itself more comfortably.
many such entrepreneurs cannot afford (yet) the rents of higher-patronage strip malls or shopping centers. Collectively, however, a number of such establishments can create a unique shopping and dining experience in, say, downtown Overland.

**Preliminary Development Program**

**Downtown Retail**

Given surrounding buying power and generally available building space and underutilized land in downtown Overland, the graph to the right depicts the amount of added square feet for major retail categories is deemed preliminarily possible. These estimates are based solely on a “shift” of existing sales and buying power from other places in Overland to the downtown area and not on net added buying power, either from population growth in the city or an expansion in the geographic market area of downtown Overland. Thus, these are likely to be conservative minimums.

Just in these categories, there could be almost 20,000 square feet of occupied retail and dining space added to the downtown area. Doing so would increase the “capture rate” of the entire Woodson road study corridor from 13.6 percent of Overland’s buying power to 17.5 percent. An overall goal for the corridor should be at least 20 percent in light of higher expectations for downtown as a place to visit combined with the accessibility and visibility of the Page Avenue area.

**Residential Additions**

A preliminary analysis of demographic trends in St. Louis County relative to Overland, plus more universal expectations for housing products among various generations (e.g., seniors, young households, Millennials), the Woodson Road corridor should target the attraction of at least 200 higher density homes. This would add 300 to 400 more residents to the city’s population, a supportable goal given historic population levels.

Some of this added housing can and should be downtown, especially in upper floors of otherwise commercial buildings. Indeed, downtown housing might be targeted toward “live-work” kinds of populations such as
artisans and crafts persons with small operations in renovated, or even new, buildings. Indeed, the character of much of downtown Overland would be quite appealing to an aspiring artisan community and could give the downtown a charm that sets it uniquely apart from other suburban downtowns and corridors in metro St. Louis.

Most additional housing in the corridor, however, should be targeted toward the middle section between Lackland Road and Flora Avenue. There is ample land, and more land can be assembled, to create a rather large complex of market-rate housing for seniors, singles, and young families.
WHAT COULD A FUTURE WOODSON ROAD LOOK LIKE?

Economic, market, and site-specific analysis to date points to realistic opportunities for Woodson Road to capture more commercial and higher-density residential development that cater to a changing set of demographic circumstances. The city of Overland, itself, is likely to be the primary market for retail, personal service, and housing in the corridor, but many Woodson Road businesses also demonstrate much wider market geographies. Not least among the latter are the various industrial-oriented shops in the corridor whose customers are likely to be located throughout the metropolitan area, if not nationally and overseas. The large retailers at the southern end of the corridor also attract wide regional audiences, much of which might also be lured further north on Woodson Road to specialty shops, unique dining, and a marvelous walking-around experience11 if an appropriate branding strategy and marketing campaign can be initiated.

COMMERCIAL AND RESIDENTIAL IN DOWNTOWN

Some of the elements of future success are already in place. For instance, a great deal of the downtown architecture and streetscape really just needs a lot of sprucing up, particularly in the public realm, as suggested by the following photograph of part of downtown Overland compared to a drawing of a similar kind of commercial environment prepared by PGAV Planners for downtown Kirkwood, Missouri.

The image and brand of well-known and well-patronized business establishments can also contribute to the public realm if the exterior architecture is substantially upgraded. For example, Chimi’s restaurant, pictured below, is one of relatively few full-service restaurants on Woodson Road and yet its exterior appearance is not very inviting. The photo on the right is from another location but is an example of how the outside of a building can be redesigned to present a more alluring image, which would likely also help to increase patron-

11 Regarding the latter, note that Historic Main Street in the city of St. Charles is probably more noted for the strolling experience than for shopping. Dining would be a strong second! The urban design of the Woodson Road corridor, especially downtown, is absolutely crucial for attracting patronage that may already be shopping in Overland.
Such investments can also encourage additional entrepreneurial growth and real estate development which, while seemingly competitive to existing businesses, will instead increase patronage for all.

Another example of moderate cost approaches to improving the public realm of downtown Overland is suggested here, contrasting the rather drab looking Cue & Cushion to a more inviting look. Indeed, the delivery van in front of Cue & Cushion suggests a more vibrant business than the building does.

This is not to say that downtown Overland does not have some good examples of exterior enhancements that truly contribute to a more attractive environment. On the contrary, the sidewalk improvements of recent years create a unifying effect and are attractive. And even some of the buildings have received façade upgrades that encourage a vision for even stronger visual and functional changes. But inconsistency in these improvements suggests disunity which, in turn, discourages broad patronage.
Moreover, excellent models of physical improvements in suburban downtowns exist in St. Louis County, as depicted in these photos from downtown Kirkwood and downtown Webster Groves. Downtown Kirkwood is a very good example of higher density housing above retail and dining. Some of this is set back from South Kirkwood Road to create Kirkwood Plaza (shown below) while immediately south of Kirkwood Plaza, the retail and housing is pushed up to the sidewalk and street.

Photos obtained from Google Images.

**Residential Between Lackland Road and Flora Avenue**

With a demonstrated potential demand for population growth and housing in Overland, some of that demand can be addressed in the area south of Lackland Road but north of the heavily auto-oriented commercial development closer to Page Avenue. This is a relatively quiet stretch of Woodson Road that already has a substantial residential character. Some of that character is interrupted by the U.S. Post Office, though that site was previously a public school, so the change in institutional uses probably did not disrupt the environs significantly. There are also a few business establishments, most notably the Dollar General and Hot Licks.¹²

There are many long-time Overland residents who, having outgrown their need for single family homes, would like to reside in senior-oriented, no-maintenance developments without having to relocate to another city. The earlier finding that Overland is populated at an above average rate by young families also suggests higher density housing opportunities for first-time owners and renters along Woodson Road. Examples of appropriate kinds of developments are suggested by these photos, all of which can be renter and/or owner-occupied.

Market rate housing in two and three story configurations would be of the right scale for Woodson Road and would serve as an appropriate transition land use between the commercial areas to the north and south, as well as a buffer to the single family homes to the west.

¹² Both of these businesses, in the opinion of this white paper, would be better located in the downtown area both to increase the collection of retail businesses and to help with the business-to-business synergy which adds patronage to all downtown establishments.
Precedent for low-rise, higher density housing in the Woodson Road corridor is already present with the series of series of duplex units, shown here, and the Woodson Park Apartments.

Seniors-only housing, as exemplified by the Village at MacKenzie Place in Affton in St. Louis County, is a significant opportunity for added residential development in the Woodson corridor. MacKenzie Place is managed by Lutheran Senior Services. Shown here is the street-front of MacKenzie Place which is a renovation of a former elementary school. More units were added to the rear to accommodate a great many more seniors. Woodson Road probably does not have the land area for that large a project, but it certainly can accommodate something on the order of the front of MacKenzie Place.
ORGANIZING FOR SUCCESS

While there are site-specific challenges and site-specific opportunities throughout the Woodson Road corridor, it is an observation of this report that the first major step toward improvements is to “get organized.” There are several local groups supporting various efforts in the corridor, particularly upgrades to the downtown environment, but these efforts are poorly coordinated, poorly funded, and inadequately led, even though all very well-intentioned. This is not a criticism of leadership and goals. Quite the opposite. But greater and more sustained accomplishments are far more likely with a stronger organizational, funding, and advocacy structure.

It is not within the capacity of this white paper to recommend a specific organizational format for the corridor or parts of it. Instead, several readily-achieve alternatives are described. Additional research supporting further public discussion is necessary, but the following can inform any future efforts.

The area most in need of a formal organization is downtown Overland. Virtually by definition, a downtown is conglomeration of interests, property owners, activities and events, and building uses. By that definition, a downtown also needs to organize itself so that all the interests and perspectives can determine strategic goals for everyone even as each interest group pursues its own goals. Enabling legislation in Missouri offers three broad methods for downtown, as well as corridor, organization.

**Advisory Commission**

An excellent example of this approach, which is relatively simple, is in Downtown Kirkwood, Missouri. The City of Kirkwood established an advisory commission (www.downtownkirkwood.com) made up of downtown interests. This group meets regularly to coordinate events and advocate for improvements in the downtown area. It is staffed, however, by city employees (primarily by an executive director), so the advisory commission requires very little direct funding. As such, it also has virtually no funding, itself, to invest in activities or capital improvements.

**Special Business District**

A special business district, or SBD, is enabled under the statutes of Missouri because an SBD must formally define its geographic boundaries and define its method for raising its own revenues. An excellent example of a nearby SBD is in downtown Maplewood, Missouri (http://www.cityofmaplewood.com/). The Maplewood SBD, like the Kirkwood
Advisory Commission, is staffed by city employees (primarily the director of community development) and has a board of directors made up of downtown interests. In addition, the Maplewood SBD raises its own funding in two ways:

- Businesses in the district pay an additional amount for their business licenses on a graduated scale. For instance, larger businesses pay a lower percentage in additional fees, but often pay more in actual dollars because they are larger.
- Taxable real estate in the district is also subject to an additional property tax of 85¢ per $100 of assessed valuation.

These funds are utilized to support various downtown events to attract more patrons, including advertising and marketing campaigns. They are also used in the purchase of occasional public improvements, though there are not enough funds to support major infrastructure upgrades. Instead, the SBD advocates for major and expensive investments to city officials and the city council.

The SBD, with backing from the city, is also eligible to plan for and spend various grants. The SBD’s web page, for instance, notes that Community Development Block Grant money from the federal government recently paid for several bike racks that were installed downtown.

In 2007, the Maplewood SBD undertook a detailed study to consider conversion to a community improvement district (CID), discussed next. At the time, the SBD board and city officials determined that a CID designation was not worth the effort, not least because a CID would require inclusion of the relatively newer, big-box stores on Hanley Road in the northwest corner of the city in order to raise significantly larger amounts of money, but much of this added funding would have to be spent in and around those larger stores rather than re-directed downtown where the greater needs are found. One of the goals of a CID would have been the hiring of an independent staff person.

**COMMUNITY IMPROVEMENT DISTRICT**

In generic terms, many of the functions of a Missouri-enabled community improvement district (CID) are managed by business improvement districts (BID) in other parts of the U.S. In essence, a CID is formed as a special interest “municipality” with a defined geographic area and a board of directors composed of the taxpayers within the district. Many retail developers “overlay” CIDs on their developments in order to raise their own sales (or property) taxes so that additional funds can help pay for capital improvements of the new...
projects. More appropriate for Woodson Road are those CIDs that are created to support revitalization of existing commercial and mixed-use areas.

Perhaps the largest CID in Missouri is Downtown St. Louis (http://www.downtownstl.org/downtown-cid/). Using a complicated “taxing” formula, the Downtown CID raises about $2.8 million per year which supports personnel and services to maintain a cleaner downtown environment and to augment normal police services with security patrols. The patrol people also serve as Downtown Guides for tourists and other visitors. Some of the CID revenue is also available for small capital improvements, but the primary purpose is to amplify the amount and quality of city services that would normally be applied downtown.

The scale of Downtown St. Louis is inappropriate for Overland, however. A better example for emulation is the South Grand Community Improvement District (http://www.southgrand.org). The South Grand CID was organized under Missouri legislation in 2001 to provide enhanced public safety, maintenance, building improvements and economic development beyond those services already supplied by the city. The district boundaries are on both sides of South Grand Boulevard extending from Utah Place north to Arsenal Street.13

Some of the advantages of the CID are:

- A consistent source of funds to improve South Grand in order to attract new investments, businesses, residents and visitors.
- The District administers a work plan focused on keeping the area safe and clean as well as sponsoring and supporting special events for the community.

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13 The South Grand CID is presently evaluating growth to its north to encompass the east side of South Grand across from Tower Grove Park.
The CID operates as a political subdivision run by a board of directors comprised of unpaid volunteers—all of whom are assessment-paying property owners within the district. Somewhat like the Downtown CID, South Grand has a fairly complicated assessment formula for raising funds. As provided by the executive director, this formula is

- Each taxable property is annually charged $0.2563 for each square foot of land area.
- Each taxable building is annually charged $0.4066 for each floor area square foot on the first, or ground, floor, plus
- Another $0.2600 for each building square foot on upper floors.

For 2015, this formula raised $211,000. In addition, the CID imposes a 0.5 percent economic development sales tax, authorized by the State of Missouri, on taxable retail sales. This tax raised another $123,000 in revenue for the district. With those funds, and other monies raised through various events and grants, the CID is able to support an office staff, a set of South Grand Guides in uniforms who walk the district, necessary clean-up services, and marketing and promotion programs.

Moreover, the South Grand CID coordinates business hours, resolves disputes between businesses, resolves disputes between businesses and city government, and lobbies on behalf of the district within city government.

**Hypothetical CID Funding for Downtown Overland**

Downtown Overland could greatly benefit from a more formal and reasonably funded organization. While no recommendations are yet offered by this white paper, the strongest organizational format is the community improvement district. Based on a cursory review of land and building area presently in the downtown area (excluding potentials for additional buildings or extensions of downtown along Lackland Road), and using a formula similar to that applied on South Grand but with lesser assessments to enhance the likelihood of approving a new CID, approximately $70,000 per year could be raised in support of CID functions. This is based on the following assessment assumptions:

- 10¢ per square foot of lot per year (about 40% of South Grand)
- 15¢ per square foot of first floor (almost 40% of South Grand)
- 8¢ per square foot of upper floors (about 30% of South Grand)
If even $70,000 per year could be supplemented with, say, an economic development sales tax, with proceeds from the Farmer’s Market, with grants, and with focused capital improvements from the city (much of which has already taken place with the sidewalks and streetscape enhancements), a relatively substantial amount of fund could be garnered to clean up and promote the north end of the Woodson Road corridor in order to attract more patronage and private real estate investment.

These calculations are based only on the downtown Overland area that is within the formal study area for the Great Streets planning process. A more lucrative CID could be created, of course, that extended the entire length of the study corridor, and even more so if it could capture the considerable amount of retailing south of Page and east of Woodson Road. But that would necessitate creation of an organization that would have to cater to vastly different business environments. The contrast between the high-traffic, auto-oriented business district at Page Avenue and the walkable, slower-paced environment of downtown would likely be unwieldy, particularly since the bulk of the funds raised would come from the Page Avenue area, so most of the CID spending would likely have to support that area.

Alternatively, the boundary of Downtown Overland could be extended, perhaps as shown on the accompanying map. This would pick up the commercial corridor along Lackland Road to west as well as the civic buildings and businesses on Lackland to the east including far enough to incorporate city hall. This “downtown” would be more all-inclusive of commercial and civic life in the core of Overland while also increasing the amount of CID and/or related funding that could be raised.

**Requirements to Create a CID**

Creating of any sort of funding or management district generally must follow strict requirements set out in Missouri state law. These aren’t onerous, but they are intended to assure that all parties that are potentially affected within a district are treated fairly. A review of the CID creation process is illustrative.
Community improvement districts are authorized in state statutes, RSMo §§ 67.1401 – 67.1571. When created, they are separate political subdivisions or nonprofit corporations which are intended to finance or provide:

- Community improvements, including (but not limited to): pedestrian malls or plazas; parks, trees, and other landscaping; public rights-of-way, utilities, parking lots/garages, and other infrastructure; and “any other useful, necessary, or desired improvement.”

- Public Services, including (but not limited to): music, news, childcare, parking, and buses/transportation; leasing space for sidewalk cafes; security services in addition to normal municipal police services; cleaning, maintenance, refuse collection, etc., also in addition to normal municipal services; promoting tourism, recreational/cultural events, special events, and business activities; and contracting for or conducting economic, planning, marketing, or other studies.

- CIDs may issue bonds for up to 20 years (that is, incur debt) payable from resources raised through the financing techniques discussed below.

- CID may demolish or renovate structures in areas declared “blighted” by the local municipal elected officials in order to catalyze public and private re-investment in real estate.

Formation of a CID requires a petition, which must be signed by property owners of at least 50% of the district’s assessed value, and at least 50% per capita of property owners in the district. In other words, half of the property owners must agree to the CID which must also include enough property owners to represent half or more of the property values. For example, if there are three property owners and one of them owns enough property to constitute 60% of the property value, that owner must agree to the CID petition in addition to at least one of the other two property owners. The two “minority value” owners cannot, themselves, agree to form the CID.

After the petition is filed and approved, the local municipal government holds a public hearing regarding formation of the district and, if acceptable to the general public (though no general election is required, the district established by municipal order or ordinance.

Other requirements include that the CID must have a board of between five and 30 directors and that the CID must have contiguous boundaries.
Petitioning and creation of the CID does not yet provide for funding of CID responsibilities which, in turn, are determined by the board of directors. There are three ways to create financing resources:

- The CID may levy a retail sales tax of up to 1% if approved by a majority of registered voters in the district, or, if there are none, the owners of real property within the district. In other words, registered voters have priority but some commercial districts have no residents, in which case a majority of the property owners decide on the sales tax. Those owners may include non-retailers.

- The CID may levy a property tax (no limit) if approved by a majority of registered voters in the district, or, if there are none, the owners of real property within the district. Again, registered voters have priority, even for property taxes that would apply to the commercial property owners.

- Or the CID may impose special assessments if approved by a majority of both (a) property owners of at least 50% of the district’s assessed value, and (b) at least 50% per capita of property owners within the district. This is the same requirement as noted above for the petitioning process. The special assessment method is used in the South Grand CID, earlier described, and for the Downtown St. Louis CID.

**BRANDING WOODSON ROAD**

There are many commercial districts and corridors in St. Louis County, and far too many of them look and function alike. This is particularly true of the south end of the Woodson Road study corridor which is designed for, and operates for, heavy automobile traffic. There are many of the same kinds of businesses in that area as are found in all parts of the county. While a marketing and branding program for Great Streets Woodson Road is a good idea, a better approach is likely to be a special branding of downtown Overland while tying the marketing for downtown to the Page Avenue area.

During meetings with various stakeholders, one broad theme for downtown and one more focused theme emerged that deserve future attention as the Great Streets plan eventually reaches implementation stages.

**Historic Charm and Incubator Spaces**

First is the uniqueness of the (sort of) historic downtown itself. Too few St. Louis County suburbs have charming old business districts (e.g., Maplewood, Kirkwood, Webster Groves, Ferguson, University City, perhaps Florissant) that have achieved renovations that make them special attractions. In some ways, downtown Wellston has that potential charm, but its surrounding economics do not bode well for revitalization for a long time. Newer and more distant suburbs effectively grew without much attention to their historic commercial districts even if they have them.
Thus, renovating structurally sound buildings in downtown Overland to their original architectural qualities is one means for creating an identity for Overland. The preliminary market research of this white paper demonstrates that more businesses can succeed in the downtown area, and downtown could even be a place for housing, especially above first level stores and offices. The building floor areas are likely to be highly suitable especially for one-of-a-kind businesses at affordable rents, ideal for entrepreneurs wanting to test their business prowess in a comfortable and eclectic environment. In a sense, then, downtown Overland can reinvent itself as both charming and an incubator for start-up businesses.

A marketing brand and campaign can then be attached to this theme. With a creative approach, this marketing brand could be extended the length of the Great Streets Woodson Road corridor to lure shoppers and diners (and commuters) along Page Avenue into downtown Overland.

**Artisan Maker Street**

America is enjoying something of a renaissance in professional arts and crafts. This applies not just to artists, but also to finely crafted products intended for customers in households to manufacturing firms. Small “artisan” shops are opening in many cities and neighborhoods where “makers” practice craftsmanship, even while using sophisticated machines, 3-D printers, and designs generated by computers.

Downtown Overland already has a few such artisan crafts businesses, the most recent and notable being the machine shop opened on Lackland Road west of Woodson. There is an art restoration business on Woodson Road. There is a screen printing business on Lackland. And with these comes demand for other businesses to supply and service the artisans, ranging from tools to be purchased at the hardware store to restaurants and coffee shops.

The unique character of downtown Overland and the unusually sized spaces created by many of the buildings suggests that downtown could be marketed to and branded for artisans. Live-work spaces/buildings can be renovated and created. Artisans can become preferred occupants under, say, an artist relocation program modeled after several successful efforts in other cities, notably Paducah, Kentucky. In that program, selected artists qualified for special, and very affordable, loan programs to occupy and renovate buildings (most of them historic housing) while using those buildings also for their business operations. In turn, the Lowertown neighborhood adjacent to downtown became not only more economically vibrant but an attraction for tourists and support businesses.
Much the same has happened, though often more organically without public sector support as in Paducah, in many other places. There are frequent stories—and documented evidence—that artisans are often the leading edge of urban revitalization. Seeking lower rents in buildings that are less functional for other businesses, artisans will congregate to support one another with a consequence that they re-create vibrant mixed-use communities. In some cases, like Paducah, the rejuvenation power of the artisan industry is institutionalized. In others, like Greenville, South Carolina, it was market-driven (i.e., organic).

In the 1990s, downtown Greenville was undergoing a resurgence, partly driven by the arts community taking over inexpensive and rundown former industrial and retail buildings along South Main Street. Eventually, downtown’s success forced most of the artists out because they could no longer afford the rents. A subsequent “settlement” further to the southwest along Pendleton Street emerged.

The Pendleton Street Arts District that emerged soon became another draw for urban reinvestment on a larger scale. In 2013, a West Side comprehensive plan for Greenville helped to identify ways to assist the artists and craftsmen to stay in the district rather than be forced out by market conditions.

Downtown Overland could take on a mix of organic artisan growth supported by various funding and service programs (public and philanthropic) to become a branded location noted for “makers” of unique and high quality products. No other location in greater St. Louis has yet captured such a theme. And it can clearly distinguish Overland from other commercial corridors and districts. Several steps could be taken to initiate and refine this concept and to work toward implementation.

1. Study other artist and make-space initiatives in other cities. Paducah and Greenville are suggest above, and they are different “models.” Others can be readily identified. Conduct site visits in selected cases to better understand issues, challenges, and conditions for success.
2. Prepare a simple inventory of available buildings and spaces (e.g., upstairs spaces vs. the entire building) where artists/artisans might be attracted. Buildings might be adaptable to work spaces or live-work spaces depending on location, building type and space, and so forth.

3. Discuss the concept with the artist community. Perhaps the best way to start this process is to meet with the Regional Arts Commission (RAC) which is based on Delmar Boulevard on the west side of the city of St. Louis (www.racstl.org). RAC has conducted surveys of artists and real estate developers to identify where artist communities might be supported.

4. Work with RAC to identify other arts and artisan groups to include in discussions. The goal should be wider dissemination of the potential for arts-related development in downtown Overland. No commitments need to be made yet, but wider discussion will reveal opportunities and constraints.

5. Bring together interests in Overland who desire to pursue this concept as an economic development initiative. This meeting might also include selected property owners and should definitely include Overland businesses and residents who have ties to artisans throughout metro St. Louis.

6. Discuss the concept with economic development officials, particularly those with the St. Louis Economic Development Partnership (SLEDP) in Clayton (www.stlpartnership.com). SLEDP is a joint organization covering the County and City of St. Louis. Identify economic research that can support a “market analysis” for downtown Overland and explore how SLEDP’s financial services can apply to an arts and maker space concept. Small business loans, grant programs, and business management support are topics to address.

7. Simultaneously, identify local banks and bankers who might set up local financing programs to support the growth of an artist-based real estate improvement program. Most such programs are best understood by local financiers who are familiar with the culture of the community and who will have personal relationships with the artists, small manufacturers, and entrepreneurs.

8. Possibly meet with staff of Missouri Main Street Connection (www момainstreet.org) to identify best practices for organizing and managing a downtown development program, particularly with reference to artists and small entrepreneurs.

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14 The idea was first brought to the attention of the Great Streets consulting team by Mr. Austin DeSain, an Overland resident who participated in various parts of the charrette in March 2016.
APPENDIX: TAPESTRY DETAILS FOR OVERLAND

Traditional Living

LifeMode Group: Hometown
Traditional Living

Households: 2,369,000
Average Household Size: 2.50
Median Age: 34.8
Median Household Income: $37,000

WHO ARE WE?
Residents in this segment live primarily in low-density, settled neighborhoods in the Midwest. The households are a mix of married-couple families and singles. Many families encompass two generations who have lived and worked in the community; their children are likely to follow suit. The manufacturing, retail trade, and health care sectors are the primary sources of employment for these residents. This is a younger market—beginning householders who are juggling the responsibilities of living on their own or a new marriage, while retaining their youthful interests in style and fun.

OUR NEIGHBORHOOD
• Married couples are the dominant household type, but fewer than expected from the younger age profile and fewer with children (Index 79); however, there are higher proportions of single-parent (Index 146) and single-person households (Index 112).
• Average household size is slightly lower at 2.50.
• Homes are primarily single family or duplexes in older neighborhoods, built before 1940 (Index 183).
• Most neighborhoods are located in lower-density urban clusters of metro areas throughout the Midwest and South.
• Average commuting time to work is slightly shorter (Index 88).
• Households have one or two vehicles.

SOCIOECONOMIC TRAITS
• Over 70% have completed high school or some college.
• Unemployment is higher at 10.9% (Index 127); labor force participation is also a bit higher at 64.6%.
• Over three quarters of households derive income from wages and salaries, augmented by Supplemental Security Income (Index 120) and public assistance (Index 149).
• Cost-conscious consumers that are comfortable with brand loyalty, unless the price is too high.
• Connected and comfortable with the Internet, they are more likely to participate in online gaming or to access dating websites.
• TV is seen as the most trusted media.
**Age by Sex**

- **Median Age:** 34.8 (US: 37.6)
- **Male:** 34
- **Female:** 35

**Race and Ethnicity**

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**Income and Net Worth**

- **Median Household Income:** $37,000
  - US Median: $55,000
- **Median Net Worth:** $29,000
  - US Median: $165,000

**Average Household Budget Index**

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<td>Transportation</td>
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<td>Health Care</td>
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<td>Entertainment &amp; Media</td>
<td>66</td>
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<td>Education</td>
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<td>Professional &amp; Social</td>
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<tr>
<td>Other</td>
<td>62</td>
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</tbody>
</table>

**Occupation by Earnings**

- **Production**
- **Transportation and Material Moving**
- **Office and Administrative Support**
- **Sales and Related**
- **Food Preparation and Serving Related**

**Graphs and Charts**

- [Image of a graph showing age distribution]
- [Bar chart showing race and ethnicity breakdown]
- [Pie chart showing income and net worth]
- [Bar chart showing average household budget index]
- [Graph showing occupation by earnings]
MARKET PROFILE
- They shop for groceries at discount stores such as Walmart supercenters.
- Kmart is also a favorite for apparel and sundry household and personal care products.
- Convenience stores are commonly used for fuel or picking up incidentals like lottery tickets.
- They tend to carry credit card balances, have student loans, and pay bills in person.
- Half of households have abandoned landlines for cell phones only.
- They watch their favorite channels including CVC, CMT, and Game Show Network.
- They’re fast food devotees.
- They enjoy outdoor activities such as camping and taking trips to the zoo.

HOUSING
Median home value is displayed for markets that are primarily owner occupied, average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
- Single Family
- Median Value: $79,000
  - US Median: $277,000

Population Characteristics
Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.

Population 10,000,000

0 Population Growth (Annual %)

0 Population Density (Persons per sq. mile)

ESRI INDEXES
Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.

Wealth Index

Socioeconomic Status Index

Housing Affordability Index
SEGMENT DENSITY

This map illustrates the density and distribution of the Traditional Living Tapestry Segment by households.
RUSTBELT TRADITIONS

WHO ARE WE?
The backbone of older industrial cities in states surrounding the Great Lakes, Rustbelt Traditions residents are a mix of married-couple families and singles living in older developments of single-family homes. While varied, the workforce is primarily white collar; with a higher concentration of skilled workers in manufacturing, retail trade, and health care. Rustbelt Traditions represents a large market of stable, hard-working consumers with modest incomes but above-average net worth (Index 111). Family-oriented, they value time spent at home. Most have lived, worked, and played in the same area for years.

OUR NEIGHBORHOOD
- Almost half (46%) of the households are married-couple families, similar to the US (48%), most without children (also similar to the US); the slightly higher proportion of singles (Index 105) reflects the aging of the population.
- Average household size is slightly lower at 2.46.
- They are movers, slightly more mobile than the US population (Index 109), but almost half of householders (46%) moved into their current homes before 2000.
- Most residents live in modest, single-family homes in older neighborhoods built in the 1950s (Index 218).
- Nearly three quarters own their homes; over half of households have mortgages.
- A large and growing market, Rustbelt Traditions residents are located in the dense urban fringes of metropolitan areas throughout the Midwest and South.
- Most households have two or more vehicles available.

SOCIOECONOMIC TRAITS
- Most have graduated from high school or spent some time at a college or university.
- Unemployment below the US at 8%; labor force participation slightly higher than the US at 67%.
- While most income derived from wages and salaries, nearly 30% of households collecting Social Security and nearly 20% drawing income from retirement accounts.
- Family-oriented consumers who value time spent at home.
- Most live, worked, and played in the same area for years.
- Budget-aware shoppers who favor American-made products.
- Read newspapers, especially the Sunday editions.

Note: The index represents the rank of the segment relative to the US norm (indexed at 100). Consumer preferences are estimated from data by U.S. BLS.
MARKET PROFILE
- Residents take advantage of convenience stores for fueling up and picking up incidentals.
- Watching television is a common pastime; many households have more than four TVs.
- Favorite programming ranges from ESPN, Animal Planet, and AMC to children's shows on Nickelodeon and Cartoon Network.
- Residents are connected; entertainment activities like online gaming dominate their Internet usage.
- Favorite family restaurants include Applebee's, Outback Steakhouse, and Texas Roadhouse.
- Radio dials are typically tuned to classic rock stations.

HOUSING
- Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.
- Typical Housing: Single Family
  - Median Value: $118,000
  - US Median: $177,000

POPULATION CHARACTERISTICS
- Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.

ESRI INDEXES
- Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.
Brief Overview – City of Overland
The City of Overland rests on the site of what was once known as “The Overland Park”, a stopping place for travelers heading west from St. Louis in the 1820s. In the 1840s, commerce was established, and a one-room school was built in 1846. In 1867 the Ritenour School District was organized, giving greater prominence to the area. In 1919, the town’s name was shortened to “Overland” to avoid confusion with the city of Overland Park, Kansas, and twenty years later the town was formally incorporated as a fourth class city. In the 1990s voters approved a change to a third class city, and in 2007 the city voted to have a city administrator form of government.

The majority of housing built in in the City of Overland was built before 1950 and radiates out from the northeast corner, near the St. Charles Rock Road, to around the area considered Overland’s downtown area – the area around Woodson Road from Lackland north to Midland. During the suburban boom of the 1950s, another one-third of Overland’s housing stock was built, leaving only 13 percent of the city’s housing stock being built in the past 65 years.

Measuring slightly more than 4.4 square miles in area, the City of Overland is dominated by residential uses (62 percent of the land area), with single-family uses (58 percent) constituting the majority of land area. The city has 14 percent of its land area in commercial uses, which are concentrated along the major road corridors: Woodson, Lackland, and Page Avenue. Approximately 1 percent is dedicated to parks and recreation uses, and the remainder is industrial/utility, institution (churches, schools and civic buildings), or vacant land.
Woodson Road Great Streets – Land Use & Urban Design

Woodson Road Project Area

The Woodson Road Great Streets project area extends from Midland Boulevard south to Page Avenue. The overall urban design and land use along the corridor reflects Overland’s development history, with older buildings, greater densities and mix of uses to the north, and more homogenous residential or auto-oriented commercial uses through the middle and southern parts of the corridor. Based largely on these characteristics, the corridor can be characterized by three distinct sub-areas: Downtown, Neighborhood, and Commercial Services. Using sub-areas allows for more detailed and nuanced exploration and understanding of the corridor.

Land use and urban design looks at how the space is used in a particular area, how land uses relate to one another to define and give character to a place, and how people experience that place. It not only takes into consideration the layout of the uses, but the types of buildings and open spaces that contain the uses, as well as the public space, such as sidewalks and roads that often define and connect neighborhoods. The following is a brief description of the land use and urban design in the three sub-areas.

Land Use relates to how property is used (for example, residential, commercial, or parks) and how those uses relate to each other. Urban Design relates to the form of an area, how uses are connected, how uses relate to the uses and experience their community.
Downtown

Assets

The Downtown area is largely defined as having an urban, main street character. This is often referred to as being pedestrian oriented or having pedestrian scale, meaning that the buildings and uses along the corridor are easily accessible by people on foot. Such character is accomplished when buildings are built up to the sidewalk, and many uses are situated right next to each other. In Downtown Overland, there are a mix of commercial, residential, institutional and utility uses. This mix of uses is not only parcel by parcel, but also within buildings, as some of the buildings on the east side of Woodson Road are two story, with retail on the first floor and residential on the second. Architectural features such as awnings, and benches and trash receptacles along the sidewalk further enhance the pedestrian-friendly feel.

The pedestrian scale of Downtown Overland is supported by wide, well-maintained sidewalks, and parking on both sides of the street. Parking along the street helps slow down moving traffic through the area and works to create a buffer between the sidewalk and the moving traffic, which provides a sense of safety for pedestrians. There is one identified mid-block crossing, at the Municipal Pavilion, for pedestrians to get from one side of Woodson Road to the other. It is marked with signage and a flashing light warning drivers that pedestrians may be crossing, and has small bump-outs that help define the pedestrian space.

In addition to the on-street parking along Woodson Road, parking for the Downtown businesses is also provided on side streets and on lots beside or behind buildings. Additional parking is provided by two municipal parking lots: one off of Tennyson Avenue, behind the Overland Optical; and another located at the Municipal Pavilion lot.

The Downtown area includes two well-maintained public spaces: Erickson Plaza and the Municipal Pavilion. Both of these spaces have had significant investments made in recent years. Erickson Plaza, situated at the southwest corner of Midland Boulevard and Woodson Road, has a pavilion, a pergola, a fountain, a bike rack, and picnic tables. The Municipal Pavilion, located on the east side of Woodson Road, between Tennyson and Everman avenues, is a large paved parking area with a large, newly constructed pavilion.
At the southern end of the Downtown area, near Lackland Avenue, the character begins to change to a more auto-oriented feel – the buildings are not built to the sidewalk, and there is more direct parking on the lot rather than on-street. Uses, such as the Walgreens and the two auto repair businesses, are designed for more auto access than pedestrian access, and typify the character of the commercial at this end of the Downtown area. Despite the auto-oriented nature at this point along the corridor, the well-maintained sidewalks continue south.

Challenges

The pedestrian appeal of the Downtown area is challenged by several factors. Perhaps of greatest significance is the presence of vacant buildings, particularly those at the northeast area of the corridor. Though the public space out front of the vacant buildings is well maintained, some of the buildings have deteriorated such that they detract from the overall feel of the corridor. Vacant buildings lack lighting at night, lack activity and vibrancy, all of which can signal that an area is uninviting.

From an urban design standpoint, the lack of uniformity of the building facades and awnings, as well as the lack of lighting along one side of the street, detracts from the appeal and sense of safety and security for pedestrians. Even the lighting that exists along the east side of the road is designed for illuminating the roadway and is not to pedestrian scale. Appeal and sense of place is further impacted by the “visual clutter” created by the overhead power lines along the east side of the road, as well as the lack of maintenance of the various planter boxes that exist up and down the sidewalk.

As mentioned, the sidewalks along Woodson Road are wide and well maintained. However, the pedestrian connections to the parking lots and along the side streets to the surrounding neighborhoods are not as uniform or consistent with the investment that has been made facing Woodson Road. The sidewalks are narrower, in need of repair in some places, and are not well lit or inviting for people to walk from outside of the corridor to nearby parking or neighborhoods. Extending safe, comfortable connections out from the main road is vital to attracting people to the businesses.

A final urban design challenge for the Downtown area is linking the two destination public spaces – Erickson Plaza and the Municipal Pavilion – to the overall fabric of Downtown. Both places are cherished locations, having received significant investment in recent years. The challenge is in
capitalizing on those investments, and making each of them true destination locations for the Downtown area. With its prominent location at the north end of the corridor, Erickson Plaza could be much more of a “gateway” amenity, announcing the start of the Downtown area. However the buildings and uses on the east side of Woodson Road detract from the overall “gateway” feel. Additionally, Erickson Plaza is difficult for pedestrians to access from the east side of Woodson Road, with the longer diagonal crossing and traffic coming from many different directions at the six-way intersection. For the Municipal Pavilion, more needs to be done to announce the presence of the market space and invite people off of Woodson Road. The bump-outs that exist to help define the pedestrian crossing at the Market are small, lack aesthetic appeal, and have limited function of really defining the pedestrian space and inviting people into the Market area.

At the southern end of the Downtown area, the character begins to change to a more auto-oriented than pedestrian-oriented character. This is typified by the uses at the Woodson Road and Lackland Road intersection, where there is a Walgreens as well as two auto repair businesses. One of the biggest challenges on this end of the Downtown area is the vacant building on the northwest corner of the intersection that was formerly a Jack in the Box.

**Neighborhood**

**Assets**

The urban design and land uses in the Neighborhood section of the Woodson Road Great Streets project area become less complex, less dynamic from north to south. The Neighborhood area quickly transitions from the commercial uses at Lackland Road to being more residential in character. The residential uses fronting Woodson Road are primarily single-family, though there is some existing higher density residential uses. This includes a few single-story multi-family with four to six units, and duplexes that line the east side for a block north and south of Wabaday Avenue. There is also a two-story multi-family apartment complex at the northwest corner of Woodson Road and Flora Avenue.
The non-residential uses in the Neighborhood area are dominated by a U.S. Post Office distribution facility located on an entire block of what was once a school between Palmer and Trescott avenues. A few service-oriented commercial uses, such as alternations or pet grooming, exist in some of the residential structures, and there is a candy and coffee shop and a Dollar General just south of Trescott Avenue.

The same wide, well-maintained sidewalks seen in the Downtown area continue on both sides of Woodson Road through the Neighborhood area and provide some pedestrian accessibility. Just across Wabaday Avenue, adjacent to the Dollar General, is a vacant parcel that is .89 acres in size that is currently for sale. Wabaday also provides access to Wyland Elementary, approximately three blocks east of the corridor.

**Challenges**

As the character of the corridor changes in the Neighborhood section, so too does the pedestrian feel. While the sidewalks are well maintained, the lighting continues only along the east side of the road, making the west sidewalk very uninviting at night. Further, there is no landscaping or tree canopy to provide shade for pedestrians. The commercial uses (coffee shop and discount retail store) mid-way through the corridor are traditional auto-oriented developments, and limit the appeal for pedestrian activity. With limited pedestrian destinations, and little to no sidewalk infrastructure on the side streets into the neighborhoods, there is very little inviting pedestrian activity in the Neighborhood area of the corridor. Additionally, though the vacant parcel is currently open green space, it is not developed and preserved as such, meaning that it could go away at some future time. There is very limited opportunity for bringing additional green space into this section of the corridor.
Commercial Services

Assets

South of Flora Avenue to Page Avenue, the Woodson Road corridor changes quite dramatically to more auto-oriented commercial services. The land uses include small strip commercial centers, medical services buildings, standalone auto repair, and light industrial uses, to name a few. While there are some vacant buildings in this section of the corridor, there are numerous thriving businesses and the lots are generally well-maintained.

The sidewalk continues on both sides of the street, and the lighting continues along the east side. The buildings are generally set back from the sidewalk, and have parking on the lots, in front of the buildings, though in some locations the buildings are build up to the property line and have parking on the side of the lot. As this stretch of the corridor is geared toward access from an automobile, many of the lot frontages have large driveways/access points.

Challenges

While there is economic activity throughout this section of the corridor, there are factors that challenge this area from reaching a greater land use development potential. The size and odd shape of the lots creates the need for unique building placement, and makes little room for on-site parking in an area that is auto-oriented and needs to accommodate vehicle traffic. The shallow depth of the lots, which back immediately to single-family residential, means there is little room for increasing lot sizes and opportunities for commercial redevelopment.

Though the area has developed as an auto-oriented, commercial section of the corridor, it could still use some pedestrian accommodations, especially for people accessing the transit stops from surrounding neighborhoods. Sections of the sidewalk stop along the front of some lots or become indistinguishable to the parking lots and driveways. Also, the presence of wide driveway access points means that pedestrians are required to interact with cars at numerous points while walking along this stretch of Woodson Road.
Land Use and Urban Design Opportunities

Throughout the charrette week, several goals and opportunities were identified for improving the Woodson Road corridor. These were collected from field observations, stakeholder interviews, and input from focus groups and keypad polling during the public meetings. Following are the significant land use and urban design opportunities that were identified for each section of the corridor.

Downtown Area Land Use and Urban Design Opportunities

- Preserve the more urban Main Street design and pedestrian scale of Downtown
- Ensure that the buildings remain at the sidewalk as any portion of the Downtown area is redeveloped
- Revise the City’s Zoning Ordinance to promote a mix of uses, within the zone district and within buildings with retail on the first floor and residential uses above
- Consider enhancing the pedestrian scale with appropriate lighting on both sides of the street, and particularly at key destinations such as Erickson Plaza and Municipal Pavilion
- Continue the well-maintained sidewalks into the adjoining neighborhoods, particularly to municipal parking lots and key destinations like Erickson Plaza and Municipal Pavilion
- Create enhancements or a “gateway” at Erickson Plaza to draw people into the corridor and build on the destinations as anchors to Downtown
  - In the short-term, consider reconfiguring the crosswalks across Woodson Road and W. Milton Avenue to shorten the pedestrian walking distance and provide easier pedestrian access to plaza *(see diagram in transportation whitepaper)*
  - In the longer term, whether as part of the intersection reconstruction options *(see transportation whitepaper)*, or just as part of a strategic demolition and greenspace project, consider demolition of the single-story building at the southeast corner of the intersection to create a complimentary greenspace with Erickson Plaza, and use that as an anchor for the northern gateway into Downtown Overland
- Create enhancements or a “gateway” at the Municipal Pavilion to draw people into the corridor and build on the destinations as anchors to Downtown
  - Signage could be incorporated into an overall streetscape branding and pedestrian-scale lighting and signage program
  - Signage could also be incorporated into the development of a bike route trailhead that would bring cyclists along Verona Avenue and end at the Municipal Pavilion
- Find opportunities to create unique public spaces and link them through signage and other features as a way to unify the Downtown area
- Create opportunities to “activate” Downtown through special events and regular activities as meaningful ways to bring people to the corridor
- As the redevelopment of Downtown is considered, look to extend the identity of Downtown east and west along Lackland Avenue, with the civic institutions anchoring the east end and continuing the mixed use commercial uses to the west
Encourage the redevelopment of the northwest corner of Lackland Avenue (the old Jack in the Box) to be an anchor point for the Downtown area

Neighborhood Area Land Use and Urban Design Opportunities

- The Neighborhood area could become a place to focus higher density housing in the form of townhomes, new multi-family, or senior housing
- Opportunities for “greening” this section of the corridor should be sought, including trees along the sidewalks and developing/preserving the vacant lot as a park or other open space for the neighborhood
- Any future commercial development considered for this section of the corridor should be targeted to the nodes at Lackland or further south to the Commercial Services area
- Pedestrian scale lighting should be installed along the west side sidewalks, and should be extended along identified pedestrian routes (Wabaday and Flora) into the adjacent neighborhoods
- As pedestrian traffic in this area is focused on transit access, additional amenities (e.g., benches, shelters, trash receptacles, lighting) should be included at the bus stops

Commercial Services Area Land Use and Urban Design Opportunities

- Ensure that sidewalks continue along the west side of Woodson Road, filling gaps where necessary
- Continue the pedestrian scale lighting along the sidewalks on the west side, to provide lighting and help unify this section of the corridor with the rest, and consider extending along identified pedestrian routes (Ridge and Brown) into the adjacent neighborhoods
- As pedestrian traffic in this area is focused on transit access, additional amenities (e.g., benches, shelters, trash receptacles, lighting) should be included at the bus stops
- Opportunities should be explored to close Miriam and Ridge and realign Brown on the east side of Woodson Road and reconfigure the parcels for redevelopment

Recommendations

Zoning

The City of Overland is currently undertaking a rewrite/addition to their Zoning Ordinance to reflect the uniqueness of the Downtown area of the Woodson Road corridor. As City officials work through the creation of the Downtown zoning district, they should consider several elements that will help ensure the preservation of the Downtown area.

Form-based elements

A form-based code, which emphasizes the urban form – how buildings, public spaces, and parking relate to the lot to create desired scale – would be appropriate for this area. While a full-fledged form-based code may not be feasible for the City to implement at this time, it could explore introducing elements into its current zoning update. One place to start would be to contact the St. Louis County Planning Department and review and discuss its new Sustainable Zoning Code, which utilizes new form-based codes. Elements that promote buildings up to the lot line/sidewalk, and that promote the mix of uses horizontally (between different lots) and
vertically (with retail on the first floor and residential or office on the second) would go far to preserve the character of the Downtown area. St. Louis County has several different districts in their form-based codes, and several elements would be appropriate for both the main D1 Downtown district and the secondary D2 Downtown district being considered by the City.

In the future, as redevelopment pressures possibly lead to a desire by the City to exert greater design control of downtown developments, the City could consider implementing a true form-based code overlay. This would entail greater architectural design guidelines, as well as more requirements AND flexibility in how sites are developed and amenities are brought into the public realm. Such an overlay should include the Downtown and secondary Downtown area along Lackland, and would be a prime tool for the City as lots are consolidated and larger developments are considered.

Another useful resource for educating City staff on the development and use of form-based codes is the Form-based Codes Institute (formbasedcodes.org). The site is full of resources and learning modules for creating and administering form-based codes.

Regulation-based incentives
While exploring inclusion of form-based elements into the zoning code, the City should also explore the uses of regulation-based incentives as a means for gaining certain public features or amenities in the Downtown. Often working hand-in-hand with form-based codes, incentives for creating amenities and public spaces can be built into the zoning and site plan review process. For example, as a property is redeveloped, the land use regulations may allow a developer to receive flexibility of uses, density, lot coverage or parking in exchange for building parklets, plazas or providing some other open space within the development. This may be one way to introduce additional green space into Downtown. As lot sizes may be a limiting factor, the incentives and desired amenities will need to be carefully considered so they do not become an impediment to redevelopment, but it could be a targeted way to promote the development of more public spaces.

Parking Requirements
Finally, as regulations are being updated, the City should consider amending its parking requirements to reflect the character of the Downtown area. Many traditional zoning codes require parking minimums, and have calculations that require an abundance of parking spaces. The result is often large parking lots that detract from the overall pedestrian scale and accessibility, shifting the focus to autos. In the Downtown area, where there is parking on the street and in nearby municipal lots, and where pedestrian access is desired over (or at least as equally to) automobiles, there is less need for parking.
Additionally, in an area that is seeking to maintain its urban form as it redevelops, shared parking should be considered, especially in areas with a mix of uses. Shared parking allows for fewer parking spaces to be required for a development, as lots used for commercial uses during the day can be shared by adjoining residential uses at night, for example. Likewise, retail developments can use shared lots that supplement the on-street parking in the neighborhood. There are many resources to guide the City in developing updated parking standards for the Downtown area. Additionally, St. Louis County has recently updated their parking standards and may be a good reference starting point.

In the short-term:

- Updates to the existing zoning ordinance to include a D1 and D2 zone district should be implemented. Uses should be carefully considered to include only those uses that promote the vision of Overland’s Downtown and extended downtown areas. This is currently being done in-house by City staff, and will be a good first step in adjusting regulations to fit the City’s vision of Downtown.
- Specific changes should be made to bring the sign and parking requirements in line with the vision and existing urban character of Downtown. This could require design and traffic professionals to help with technical design elements and calculations. In addition to crafting the technical specifications, the City should include training on administration of the tools, and how best to use them in the site review process.

In the long-term:

- The City could consider a form-based overlay for the D1 and D2 Downtown areas that would detail the site design and building elements desired by the City. Such an overlay would build on the interim updates and include a much more robust review of architectural elements and development of the form-based regulations. While reviewing St. Louis County’s ordinance (and others across the county) would be a good starting point, the City should hire a planning and design professional to ensure the technical design elements are appropriate for the City’s Downtown areas. Administration of a form-based overlay is much more complex than traditional zoning, and the City should include training on administration of the overlay district.

Neighborhood Connectivity

The City should continue to seek ways to reinforce the pedestrian connectivity with the surrounding neighborhoods. This is important in the Downtown area as a way to link the businesses on the corridor with on-street parking on side streets, to make the municipal lots more inviting and accessible, and to bring people on-foot from nearby neighborhoods. In the Neighborhood and Commercial Services sections of the corridor, this is important to link people from the surrounding neighborhoods to the transit stops and commercial services along the corridor.
Pedestrian Amenities

In the Downtown area, neighborhood connectivity could be enhanced in a few ways. One is continuing the well-maintained sidewalks from the main corridor to the side streets. Priority should be given to connecting Woodson Road to the municipal parking lot on Tennyson Avenue, as well as providing an attractive pedestrian access through the Municipal Pavilion to Verona Avenue. This would have the effect of connecting people from east and west to the heart of the Downtown area. In addition to the sidewalks, lighting should be used to provide safety to these destinations at night and further unify the pedestrian experience throughout the corridor. At the southern end of Downtown, the pedestrian experience (well-maintained sidewalks and pedestrian scale lighting) should be extended along Lackland Avenue to help tie the corridor to the civic uses to the east and future commercial/mixed-use redevelopment to the west.

The City should explore the use of Community Development Block Grant (CDBG) funds, any “enhancement” funds such as the Transportation Alternative Program available through the surface transportation funding, and possibly through requirements from developers as areas along the corridor are redeveloped. Lighting and sidewalks can also be part of a roadway reconstruction or rehabilitation project. Having a well thought out plan that shows implementation of an overall vision and builds on past investments will help the City be competitive for such funds, and prepared when opportunities to leverage planned projects arise.
Transit Amenities

Throughout the Woodson Road corridor, neighborhood connectivity could be enhanced by having additional amenities at popular transit stops. This could include benches, shelters, trash receptacles, and lighting. The Overland Beautification Committee already provides some street benches and trash cans in Downtown. The Committee, with support from the City, could approach Metro to explore the possibility of Metro providing benches or possibly shelters at key transit stops at Lackland (perhaps as part of the development of a parklet) and at the entry to the Municipal Pavilion, and then leverage that investment with amenities of its own. The Beautification Committee and the City should be strategic and demonstrate to Metro how it plans to leverage the agency’s investment.

Traffic Calming

Another way to promote neighborhood connectivity is through the use of various traffic calming measures. While traffic calming is designed, as the name implies, to calm traffic along a roadway, it is also used to promote pedestrian accessibility and enhance the overall pedestrian experience along a roadway. In this context, the use of traffic calming design elements bring a greater awareness of pedestrians traveling along and across roadways, making them more visible to motorists, and improving the ability of pedestrians to cross a street more safely and quickly.

There are a variety of traffic calming measures that could be used on the Woodson Road corridor. In the Downtown area, bumpouts could be used at key intersections (e.g., Tennyson Avenue and the mid-block crossing at the Municipal Pavilion) as a way to shorten the distance a pedestrian has to cross a street. Bumpouts not only provide added protection for pedestrians, but help define the on-street parking areas and can be designed to provide green infrastructure. Another traffic calming measure is raised or textured cross walks. This could be used in conjunction with bumpouts to further identify the pedestrian space within the
roadway, and also helps slow cars down as they travel over it. At the Municipal Pavilion mid-block crossing, the City could explore the use of a speed table, where a larger crossing area is defined and raised slightly, offering a larger pedestrian crossing area and having the effect of further slowing down vehicle traffic as cars experience the slight grade change. A speed table could also be used at the Flora Avenue intersection in the Neighborhood area, as a way to provide greater awareness of pedestrians, and an overall safer crossing experience.

Continuity of Placemaking

Placemaking is the approach of finding what makes a neighborhood or corridor unique, and enhancing it and promoting it through building design, pedestrian-scale amenities, and public spaces that provide identity, character and places for people to gather and celebrate their community. In Overland’s Downtown area there are a few ways that the City could approach placemaking to create a unique sense of place for businesses and nearby residents – by creating gateways that announce an area; by creating open spaces for gathering; and through streetscape improvements such as wayfinding (signage), street furniture, and lighting. The streetscape improvements can even be extended south into the other areas of the corridor to provide identity and unity of place.

These gateways, open spaces and amenities can be created though zoning incentives, by private development, and through public-private partnerships. Having a clear vision with consistent theme and aesthetic quality is necessary to preserve the unifying character the City is seeking. Engaging the businesses and residents in defining that character and hiring professionals to design the elements and establish an implementation plan would help advance the City’s goals.

Gateways

There are two key points in the Downtown area that could be developed as gateways for the community. The first is the northern entry point at Midland Boulevard, at Erickson Plaza. Erickson Plaza is a beautiful public space situated at the north end of the Downtown area. The City should build on the significant investment already made in the plaza to use the space to announce the start of Downtown and to invite people into the corridor. This could be accomplished by extending some of the greenspace into the parking lot to the south, and removing the single-story building to the east across Woodson Road. Having open space on both sides of Woodson Road, shortening the crossing between the parcels, and connecting the space with consistent streetscape features could provide a focal point for
entering the Downtown area. It would link the east and west sides of Woodson Road, and invite people walking Downtown to use Erickson Plaza.

Another location to consider a gateway is at the Municipal Pavilion. With the pavilion further east into the lot, the City should explore ways to invite people off of Woodson Road and into the market space. This could include traffic calming features to highlight pedestrians crossing Woodson Road to access the space, as well as streetscape, signage and green features to welcome people off the sidewalk. Such functional and aesthetic enhancements need to define the access from Woodson Road into the lot, and define the sense of place for the Municipal Pavilion and other activities at the pavilion. Another way to tie the lot into the neighborhood is to extend the gateway feel to Verona Avenue, and unify the space as a destination not only for traffic off of Woodson Road, but also from surrounding neighborhoods via Verona Avenue. This link would not only serve pedestrians from adjacent neighborhoods, but also provide an alternative connection to the civic spaces at Lackland Road, and serve as a connection point for bicyclists who choose Verona Avenue as an alternative route to riding on Woodson Road. Inviting access from both the east and west at the Municipal Pavilion not only enhances that public space, but helps unify the neighborhoods throughout the area.

The gateway aesthetic established for Erickson Plaza and the Municipal Pavilion could be used elsewhere along the corridor to help unify the look and feel up and down Woodson Road. The same lighting, streetscape amenities, and greenspace could be used at Lackland Road as the
southern gateway to Downtown, and as a way to unify the civic destinations to the east and any commercial redevelopment to the west. The greatest opportunity for this is when the former Jack in the Box site redevelops and amenities can be built into the future site. The same features could be used at Flora Avenue, along with the traffic calming recommendations, to help bring people up from Page Avenue in the south into the Downtown area.

**Parklets**

Building on the gateway theme, the City should explore opportunities for bringing in public green space into the corridor. One way to do this is through the development of parklets, small areas of open space that have a few amenities for pedestrians, bring nature into the urban environment, and provide a small civic gathering space that has an aesthetic appeal that is consistent with the urban design and placemaking for the corridor. Three opportunities were identified as having potential to be parklets. The first is the piece of the Charter lot that extends to Woodson Road. This piece of ground – already fenced off from the main Charter lot and containing a bus stop – is ideal for bringing street furniture, lighting, and landscaping that creates a gathering point for pedestrians using the transit stop. A parklet in this location would provide some continuity of open space from Lackland Road to Midland Boulevard, and it would also support the future creation of a gateway at Lackland when the former Jack in the Box site redevelops.

Other locations for small parklets could be:

- The vacant parcel just south of Dobbs Tire & Auto, to support the bus stop.
- The corner of the Post Office lot at Palmer Avenue, to support the bus stop.
- The vacant lot across from Wabaday Avenue. This has the potential to be a larger park area, but preservation of some portion for a parklet should be considered if the site redevelops.
These opportunities do not have to start out with significant investment. Simply introducing benches, or shade in the form of a structure or trees, and other aesthetically pleasing features, then building additional amenities over time, would bring gathering space into the corridor. These public spaces could be created through redevelopment incentives, through private investment, or through public-private partnerships.

![Example of parklet](image1.png)  ![Example of parklet](image2.png)

**Activating Public Spaces**

Finally, there was a great deal of consensus throughout the charrette in the need for activities in the Downtown area of the corridor. Ideas were explored such as holding additional block parties in Downtown, similar to the one currently held by the City in the summer. This would close Woodson Road to autos and encourage bicycle and pedestrian activity throughout Downtown. Other ideas included regularly hosting food trucks at the Municipal Pavilion lot or the parking lot at Erickson Plaza, as a way to invite people to those public spaces and provide a reason to be Downtown.

Another idea was to link bike infrastructure (bike lanes, signage) to the Woodson Road corridor as well as Verona Avenue, as a way to bring bicyclists safely into Downtown. The Municipal Pavilion area could become a bike trailhead and include amenities such as a water station, bike repair shop, and bike racks, as a way to support cyclists traveling from all over the city and the region.

Another idea the City could explore is outdoor/sidewalk dining. This does not have to be permitted permanently, but could be piloted during special events to explore how it would be received and issues that would need to be addressed if it were implemented. If outdoor dining was desired, it should be addressed, in part, in an update to the City’s zoning ordinance.
Woodson Road Great Streets Transportation Planning White Paper; July 6, 2016

CBB conducted an evaluation of the existing conditions along the corridor. These items are discussed in the following sections and include:

- Traffic volumes and speeds
- Parking supply and utilization
- Transit routes and schedules
- Crash history
- Functional classification
- Physical characteristics such as lane configuration, lane width, and access management (driveways and curb cuts)
- Traffic control such as traffic signals and stop signs
- Pedestrian facilities including sidewalks, crosswalks, and Americans with Disabilities Act (ADA) accommodations
- Trails and greenways, and existing bicycle facilities.

Traffic Counts

Multi-day midblock traffic and speed data was collected at three locations along Woodson Road (south of Lackland Road, between Lackland Road and Midland Boulevard, and north of Midland Boulevard). Additionally, peak period traffic turning movement counts were obtained for three of the signalized intersections along the study corridor (Page Avenue, Lackland Road, and Midland Boulevard).

Multi-day Traffic and Speed Data

CBB conducted traffic machine counts on Woodson Road from March 2nd to March 9th, 2016. The midblock machine counts measured traffic volumes and speeds along the corridor. Summary data is provided in the table and figures below as well in the attached exhibits. This data shows average daily volumes of between 9,000 vpd and 10,000 vehicles per day (vpd) north and south of downtown Overland with daily volumes between 7,000 vpd and 8,000 vpd in the downtown. Traffic speeds are well controlled throughout the study area with average speeds of 30 mph south of Lackland Road and 24 mph north of Lackland Road. 85% speeds (the speed that 85% of drivers will drive at or slower than) are 34 mph south of Lackland Road and 28 mph north of Lackland Road. Average Saturday traffic volumes are about 90% of weekday traffic volumes and peak hour traffic volumes are about 10% of daily traffic volumes.

<table>
<thead>
<tr>
<th></th>
<th>North of Midland Boulevard</th>
<th>Between Midland Boulevard and Lackland Road</th>
<th>South of Lackland Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekday ADT (vpd)</td>
<td>9,500</td>
<td>7,250</td>
<td>9,500</td>
</tr>
<tr>
<td>Saturday ADT (vpd)</td>
<td>8,750</td>
<td>6,750</td>
<td>8,500</td>
</tr>
<tr>
<td>Peak Hourly Volume (vpd)</td>
<td>900</td>
<td>700</td>
<td>900</td>
</tr>
<tr>
<td>Posted Speed (mph)</td>
<td>20</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Average Speed (mph)</td>
<td>24</td>
<td>24</td>
<td>34</td>
</tr>
<tr>
<td>85% Speed (mph)</td>
<td>28</td>
<td>28</td>
<td>34</td>
</tr>
</tbody>
</table>

Daily traffic counts were also obtained from other sources for Midland Boulevard (approximately 13,250 vpd west of Woodland Road and 9,500 vpd east of Woodland Road) Brown Road (approximately 4,250 vpd), and Page Avenue (approximately 31,000 vpd). The following ADT ranges are typical volumes for various facility types and show that Woodson Road fits in the range for a 2-lane roadway between Midland Boulevard and Lackland Road and a 3-lane roadway both north of Midland Boulevard and south of Lackland Road.

- 2 – Lane Road: Under 15,000 vpd
- 3 – Lane Road: 10,000 to 20,000 vpd
- 4 – Lane Road: 15,000 to 30,000 vpd
- 5 – Lane Road: 20,000 to 45,000 vpd
Woodson Road Traffic Counts South of Lackland Road (March 2, 2016 to March 8, 2016)

- Total Woodson Road Traffic Volumes
- Northbound Woodson Road Traffic Volumes
- Southbound Woodson Road Traffic Volumes

Woodson Road Traffic Speed South of Lackland Road
(March 2, 2016 to March 8, 2016)

- Posted Speed = 30 MPH
- Average Speed = 30 mph
- 85% Speed = 34 mph
Woodson Rd. Traffic Counts between Lackland Rd. and Midland Blvd. (March 2, 2016 to March 9, 2016)

- Total Woodson Road Traffic Volumes
- Northbound Woodson Road Traffic Volumes
- Southbound Woodson Road Traffic Volumes

Woodson Road Traffic Speed Between Lackland Road and Midland Blvd. (March 2, 2016 to March 9, 2016)

- Posted Speed = 20 MPH
- Average Speed = 24 mph
- 85% Speed = 28 mph
Woodson Road Traffic Counts North of Midland Blvd. (March 2, 2016 to March 9, 2016)

- Posted Speed = 20 MPH
- Average Speed = 24 mph
- 85% Speed = 28 mph
Manual Turning Movement Counts

Peak period traffic turning movement counts were obtained for three of the signalized intersections along the study corridor (Page Avenue, Lackland Road, and Midland Boulevard). Summary count data is provided in the attached exhibits.

- Midland Boulevard: Traffic counts were obtained based upon a study of the Woodland Road/Midland Boulevard/Milton Avenue intersection study conducted by St. Louis County in 2012 (St. Louis County Project AR-1230). This work built upon a Transportation Engineering Assistance Program (TEAP) study conducted by CBB for the City of Overland in 2009. The counts used in this study were collected in 2009.
- Lackland Road: Traffic counts at this intersection were collected by CBB for this study on March 1, 2016.
- Page Avenue: Traffic counts were obtained from a Traffic Impact Study (TIS) completed in 2012. The Page Avenue/Woodson Road traffic count used in this study was collected in February 2006, but was validated by counts collected at adjacent intersections collected for the QT TIS in September 2012.

Parking

A parking study was performed in March 2016 to understand the availability of public parking and how it is being used. The parking study focused on the downtown portion of the Woodson Road Corridor. Parking counts were performed at two different times: 1) a weekday from 8 am – 6 pm, and 2) on a weekend during an event (the March 12, 2016 Overland Craft Fair – located at the Community Center) from 10 am – 2 pm. CBB conducted an inventory of public parking spots were located and developed three different zones of parking.

- Zone 1 includes the 3 City parking lots – two located in the area by the Overland Farmers Market, and one located just south of Tennyson Avenue behind the building fronting Main Street.
- Zone 2 includes all of the parking on the Woodson Road Corridor between Lackland Road and Midland Boulevard.
- Zone 3 includes side-street parking in areas close to and adjacent to downtown. (e.g., Lackland, Marlow, Everman and Tennyson).

A summary of the results is provided below and additional information is provided in the attached exhibits.

<table>
<thead>
<tr>
<th></th>
<th>Zone 1 City Parking Lots</th>
<th>Zone 2 Woodson On-Street</th>
<th>Zone 3 Side Street On-Street</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Public Spaces</td>
<td>119</td>
<td>41</td>
<td>164</td>
<td>324</td>
</tr>
<tr>
<td>Average Weekday AM (8 AM - 10 AM) Utilization</td>
<td>13%</td>
<td>18%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Average Weekday Midday (10 AM - 2 PM) Utilization</td>
<td>22%</td>
<td>35%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Average Weekday PM (2 PM - 6 PM) Utilization</td>
<td>23%</td>
<td>38%</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>Average Saturday Event (10 AM - 2 PM) Utilization</td>
<td>27%</td>
<td>57%</td>
<td>18%</td>
<td>26%</td>
</tr>
<tr>
<td>Maximum Weekday AM (8 AM - 10 AM) Utilization</td>
<td>18%</td>
<td>20%</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>Maximum Weekday Midday (10 AM - 2 PM) Utilization</td>
<td>25%</td>
<td>46%</td>
<td>16%</td>
<td>23%</td>
</tr>
<tr>
<td>Maximum Weekday PM (2 PM - 6 PM) Utilization</td>
<td>26%</td>
<td>41%</td>
<td>18%</td>
<td>23%</td>
</tr>
<tr>
<td>Maximum Saturday Event (10 AM - 2 PM) Utilization</td>
<td>28%</td>
<td>61%</td>
<td>20%</td>
<td>27%</td>
</tr>
</tbody>
</table>

With this information, CBB determined there is sufficient public parking available in the downtown area for existing conditions. In fact, there is excess parking capacity that could serve future economic development. While on-street parking on Woodson Road is the most heavily used (Saturday average utilization of 57% with a peak usage of 61%) side-
street on-street parking has relatively low usage (Saturday average utilization of 18% with a peak usage of 20%). Overall usage is less than 30% at any given time during both the weekday and a Saturday. To further highlight the availability of parking, during keypad polling conducted at the charrette 84% of participants responded that parking was “very convenient” or “usually not a problem”. However, it is important to note that due to the study schedule observations were not taken during the summer Farmer’s Market or Overland Block Party, when parking utilization is expected to peak.

Transit
The Woodson Road corridor is serviced by Metrobus Routes 33, 66, and 94. Routes 33 and 66 both travel on Woodson Road between Lackland Road and Midland Boulevard in downtown Overland, offering transfer opportunities between the routes. Routes 66 and Route 94 intersect at Page Avenue, providing transfer opportunities. On the southern section of the corridor, Metrobus 94 (Page Avenue) is heavily travelled moving people throughout the region. Further, all three routes have connections to MetroLink. Bus route and stop locations are provided in the attached exhibits. Further information is provided in the following sections.

Metrobus 33 – Dorsett Lackland
Metrobus 33 serves communities located in St. Louis County and connects to shopping centers and jobs (including the Westport Plaza job center) from Westport Plaza to St. Charles Rock Road. Commuters can connect to the larger system at the Rock Road Metrolink Center to reach more destinations within the St. Louis Region. The route turns northbound on Woodson Road at Lackland Road and exits the corridor toward the east at Midland Boulevard. The route runs from 5 AM to past 11 PM with headways varying between 40 minutes and 1 hour depending on time of day. The route intersects with several other Metrobus lines and connects with MetroLink at the Rock Road Station. Metrobus 33 has several stops throughout the study area, which are spaced at less than quarter-mile intervals. Bus stop locations are shown on the attached exhibits. Transfer opportunities exist with Metrobus 66 where the routes overlap along Woodson Road between Lackland Road and Midland Boulevard. Bus-stops along the route in the study corridor have limited amenities including benches and/or trash cans at some locations. There are no bus-shelters in the study area. In 2015 Route 33 carried on the order of 300,000 riders. See the following links for additional information:
http://www.metrostlouis.org/PlanYourTrip/RouteDescriptions.aspx#3033
http://www.metrostlouis.org/Libraries/Metrobus_Schedules/33031416.pdf
http://www.metrostlouis.org/Libraries/Metrobus_Maps/Map33031416.pdf
Metrobus 66 – Clayton Airport

Metrobus 66 provides a direct rush hour connection between the City of Clayton and Lambert St. Louis Airport. The route runs on Woodson road starting just South of Overland Shopping Plaza at Kemeland and moves northbound to Natural Bridge Road. Because the route is primarily a rush hour job connection, the service is limited. During the morning commute the route operates in the AM hours from 5:59 to 8:25, with thirty minute headways. During the evening commute the route operates in the PM from 3:36 to 6:04, also with 30 minute headways. The route intersects with several other Metrobus lines and connects with MetroLink at the Clayton Transit Center. Metrobus 66 has several stops throughout the study area, which are spaced at less than quarter-mile intervals. These bus stop locations are shown on the attached exhibits. Transfer opportunities exist with Metrobus 33 where the routes overlap along Woodson Road between Lackland Road and Midland Boulevard, as well as with Metrobus 94 at the intersection Woodson Road/Page Avenue. Bus-stops along the route in the study corridor have limited amenities. There are some benches and/or trash cans in the downtown area, with little beyond bus-stop signage south of Lackland Road. There are no bus-shelters in the study area. In 2015 Route 66 carried on the order of 45,000 riders. See the following links for additional information:

http://www.metrostlouis.org/PlanYourTrip/RouteDescriptions.aspx#3066
http://www.metrostlouis.org/Libraries/Metrobus_Schedules/66061013.pdf
http://www.metrostlouis.org/Libraries/Metrobus_Maps/Map94031416.pdf
Metrobus 94 – Page
The Metrobus 94 Page operates on the busy Page Avenue corridor from Downtown St. Louis to Westport Plaza. The route serves several Saint Louis County neighborhoods providing access to commercial services, retail, and light industrial jobs. The #94 also links riders to several job centers, such as Westport and several business parks near Page Road, Lindbergh Boulevard, and Baur Boulevard. The Page route starts service at just after 4:00 am and runs continuously until after midnight with stops ranging from every 30 minutes to every hour (more frequent stops during AM and PM rush commuting times). The route intersects with thirty-three other Metrobus lines, and connects to Metrolink at both the Wellston and Civic Center stations. Metrobus 94 has a stop at the Woodson Road/Page Avenue intersection. Transfer opportunities exist with Metrobus 66 at this stop. This stop has limited amenities including bus-stop signs and a bench along westbound Page Avenue. There are no bus-shelters in the study area. In 2015 Route 94 carried on the order of 1,000,000 riders. See the following links for additional information:
http://www.metrostlouis.org/PlanYourTrip/RouteDescriptions.aspx#3094
http://www.metrostlouis.org/Libraries/Metrobus_Schedules/94031416.pdf
http://www.metrostlouis.org/Libraries/Metrobus_Maps/Map94031416.pdf

Crash History
CBB obtained crash data from the Overland Police Department and also from the Missouri State Highway Patrol Website: https://www.mshp.dps.missouri.gov/TR15Map/index.jsp. A total of 38 injury crashes occurred in the corridor between 2013 and 2015 resulting in a total of 49 people injured. No roadway fatalities occurred during this period. Injury crashes include collisions between motorists and 4 pedestrians as well as 3 bicyclists. A summary is provided in the table below and additional information is available in the attached exhibits.
### Traffic Crashes on or at Woodson Road
#### Between Page and Baltimore (inclusive)
#### 2013-2015

<table>
<thead>
<tr>
<th></th>
<th># Injured</th>
<th>Injuries</th>
<th>Ped Crashes</th>
<th>Bike Crashes</th>
<th>Traffic Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>BALTIMORE</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARGYLE</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIDLAND</td>
<td>10</td>
<td>7</td>
<td>3</td>
<td></td>
<td>Traffic Signal</td>
</tr>
<tr>
<td>TENNYSON</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVERMAN</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARLOWE</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LACKLAND</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td>Traffic Signal</td>
</tr>
<tr>
<td>PALMER</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLORA</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RIDGE</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BROWN</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>Traffic Signal</td>
</tr>
<tr>
<td>MINERVA</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAGE</td>
<td>23</td>
<td>16</td>
<td>4</td>
<td>3</td>
<td>Traffic Signal</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>49</strong></td>
<td><strong>38</strong></td>
<td><strong>4</strong></td>
<td><strong>3</strong></td>
<td></td>
</tr>
</tbody>
</table>

Specific areas of concern:

- The signalized intersection at Midland Boulevard/Woodson Road/Milton Avenue had 7 injury crashes (10 injuries total), with three crashes involving pedestrians. This is a 6 legged intersection that can be confusing to motorists and has long crossing distances for pedestrians. This signalized intersection has an injury rate that is high for the St. Louis Metro area and the large number of pedestrians injured at this location is alarming. Alternatives to improve this intersection are provided in this study document.

- Only 2 injury crashes occurred in the downtown portion of the corridor. There was also one crash involving a bicycle at Everman. The combined segment has a relatively low crash rate for the St. Louis Metro area.

- The signalized intersection at Lackland Road had 3 injury crashes (resulting in 3 injuries). The intersection’s crash rate is not untypical for St. Louis Metro area traffic signals.

- 8 injury crashes occurred in the neighborhood portion of the corridor (9 injuries total), with two crashes involving bicyclists (at intersections of Ridge and Minerva). Although this roadway segment has a relatively low crash rate for St. Louis Metro area arterial roadways, the two crashes with bicyclists are concerning. The study’s recommendation for a shared use path along the west side of Woodson Road should address this issue.

- The signalized intersection at Page Avenue/Woodson Road had 16 injury crashes (23 injuries total). This is a wide intersection with heavy traffic volumes. This intersection has a relatively high crash rate for St. Louis Metro area traffic signals. Recommendations for improvements at this intersection are provided in this study document.

### Roadway Inventory

Data was summarized for roadway width and functional classification, pedestrian facilities, trails and greenways and bicycle facilities.

### Description of Study Roadways

The study roadways are described in the following section. The discussion is broken down by functional classification, which is useful for defining how a roadway fits into both the roadway network and community. The study area includes one Principal Arterial (Page Avenue); 2 Minor arterials (Woodson Road and Midland Boulevard); 3 Major Collectors (Lackland Road, Flora Avenue, and Brown Road); and several Local Roads.
• Principal Arterial: Page Avenue is the only Principal Arterial located in the study corridor. In the study area, Page Avenue is a MoDOT owned wide five lane arterial providing a connection between the City of St. Louis (at Dr. Martin Luther King Drive) to MoDOT Route 364 at I-270 (ultimately continuing as MoDOT Route 364 to I-64 in St. Charles County). Principal Arterials serve major metropolitan centers and provide a high level of mobility. Page Avenue is a heavy commercial corridor with access to a number of shopping and employment centers. While Page Avenue provides convenient access to the regional freeway system for those traveling by auto, it also presents a barrier to pedestrians and bicyclists needing to cross it. Thus, with the heavy usage of the Metro 94 Bus Route and the future Centennial Greenway south of Overland Shopping Plaza, it is important to enhance pedestrian and bicycle connections across Page Avenue. The intersection at Page Avenue and Woodson Road is controlled by a MoDOT owned traffic signal.

• Minor Arterials: Woodson Road and Midland Boulevard are the two Minor Arterials located within the corridor. Minor Arterials serve shorter trips and as compared to principal arterials and offer connections to the larger roads within the system. These help provide connections to and within the community.

  o St. Louis County owns Midland Boulevard and has expressed an interest in considering the implementation of a road diet on a portion of this route including dedicated bicycle lanes due to relatively low traffic volumes and high bicycle usage. The County is in early exploration of this concept, and no time frame has been identified for any changes. In the study area, Midland Boulevard is currently a four lane roadway providing a connection between University City (ending at Delmar Boulevard) to Dorsett Road at Lindberg Boulevard (ultimately continuing west as Dorsett Road across I-270). The intersection at Midland Boulevard and Woodson Road is controlled by a St. Louis County owned traffic signal.

  o The City of Overland recently took over jurisdiction from St Louis County of the section of Woodson Road in the study area. Woodson Road provides a connection from Natural Bridge Road (near Lambert Airport) to McKnight Road (ultimately continuing as McKnight Road to Delmar Boulevard near I-170). Additional information about Woodson Road is provided in the attached exhibits.

Woodson Road between Midland Boulevard and Lackland Road is generally considered downtown Overland. This section of Woodson Road generally has two lanes (one lane in each direction), on-street parking, and wide sidewalks. Pavement width is generally 40’.

Woodson Road between Lackland Road and Brown Avenue generally has a three lane cross section (one lane in each direction with a center turn lane) with 35-40’ of driving pavement. North of Flora Avenue this section has 6’ sidewalks and slightly narrower pavement. 5’ sidewalks and slightly wider driving pavement are provided South of Flora Avenue. Right-of-way is generally 50’ in this section of the corridor.
Between Brown Road and the Great Rivers Greenway Railroad Trestle (located just under a quarter-mile south of Page Avenue), Woodson Road transitions from a three-lane road on either end to a six lane roadway (including turn lanes) at the intersection at Page Avenue. Several sections of sidewalk are missing on the north side of the intersection (on both the east and west sides of Woodson Road). South of the Great Rivers Greenway Railroad Trestle Woodson Road has a 3-lane cross section (with a center turn lane) and bike lanes.

- Major Collectors: Collectors serve as a critical connection by gathering the traffic from the local roads, and moving them to the larger arterial network. These roadways also serve as important local connections within neighborhoods.
  - In the study area, Lackland Road is a two lane Road with on-street parking providing a connection across Natural Bridge Road (near I-170) on the east and across Warson Road (near Lindberg Avenue) on the west. The intersection of Lackland Road and Woodson Road is controlled by a City of Overland traffic signal. This is the only traffic signal owned by the City of Overland.
  - Overland owns Flora Avenue, which provides a connection from Woodson Road to Lackland Road (a little under a mile west of the intersection with Woodland Road). Flora Avenue is largely a residential street and is controlled by a four-way stop at the intersection with Woodson Road.
  - St. Louis County owns Brown Road. Brown Road provides a connection from Woodson Road to James McDonnell Boulevard at Natural Bridge Road (ultimately continuing as James McDonnell Boulevard to Air Cargo Road at Lambert Airport). Brown Road provides a parallel connection to Woodson Road between the Woodson Road/Brown Road intersection and Midland Boulevard. The intersection at Brown Road and Woodson Road is controlled by a St. Louis County owned traffic signal.

- Local Roads: All other roads that feed into Woodson Road within the corridor are identified as local roads. These roads are not meant for thru traffic, and are intended to serve adjacent land uses. Metro bus traffic typically does not move on any of these local roads, although these roads may carry School Bus traffic. These roads are generally well suited for bicycle and pedestrian usage due to the lower traffic volumes and speeds. Many of the local roads within the corridor have ample room for parking and can serve as pedestrian connections between local neighborhoods and the Woodson Road Corridor.

Pedestrian Facilities

Woodson Road is an important pedestrian connection to both downtown Overland and the Page Avenue corridor (including for transit riders of the #94 Page Metrobus). As an important pedestrian corridor, it is critical to invest in pedestrian facilities that enhance safety and user experience. The pedestrian experience differs by segment of the corridor.

- **Downtown Overland (Midland to Lackland):** Pedestrian facilities in this segment of the corridor are largely sufficient for moving people on foot through the corridor. There are sidewalks located the entire length of this segment, and marked crosswalks at Lackland, the Farmers Market Parking lot, Tennyson and Midland and Milton. There are pedestrian signals at the Lackland and Woodson intersection, as well as at the Midland and Milton – Woodson intersection. There is also a curb extension and flashing pedestrian beacon at the
crosswalk near the farmer’s market parking lot. Buildings have small setbacks and offer an enclosed feeling for pedestrians moving through the corridor. However, the segment is predominantly hardscape with little vegetation throughout. This can increase urban heat island effect, and make the feeling for pedestrians undesirable in the warmer months.

- **Neighborhood (Lackland to Flora):** The neighborhood segment has sidewalks throughout the entire stretch of Woodson Road. However, the multiple curb cuts that access the businesses and residences that abut Woodson Road and can create a challenging crossing experience for pedestrians. There are marked crosswalks on the side streets at Flora (and also across Woodson at this location), Palmer, and Trescott. The only marked crossing of Woodson in this segment is at Flora, which means that pedestrians must travel from Lackland to Flora (or vice versa) before finding a marked crosswalk. This creates a challenging trip for pedestrians trying to access both sides of the corridor (residences or businesses). There are two benches in this segment of the corridor – one in the northern portion near a Metrobus stop, and one in front of Dollar General. Trees are minimal and landscaping is not maintained. For pedestrians utilizing this section of the corridor in warmer months, there is no respite from heat as there is no shade due to the lack of tress. The hardscaped environment, and ample amount of pervious surface do not create a strong sense of place for pedestrians wanting to travel on foot at this location.

- **Convenience Service (Flora to Page):** The convenience service segment has continuous sidewalks north of Brown Road. Similar to the neighborhood segment, the convenience service segment has many driveways that can create a challenging atmosphere for pedestrians. There are marked crosswalks on the side streets at Kalen, Miriam, Ridge, Romaine, Brown and Minerva. The signal at Page includes a crosswalk in every direction, with pedestrian signals and push buttons. There are pedestrian signals and push buttons located at Brown road. Travelling between Brown Road and Page Avenue can be a challenge as there are several segments of missing sidewalks. Similar to the neighborhood segment of the corridor, landscaping is minimal in this section of the corridor, and can enhance the urban heat island effect on warmer days. Pedestrians experience an atmosphere with a lot of pervious surface and can feel out of place in the environment.

**Trails and Greenways**

Currently, there are no trails or greenways located within the study corridor, but there are planned routes near the corridor. The Centennial Greenway Master plan shows a future connection from the North River Front (City of St. Louis) to Creve Coeur Park, which then connects to the Katy Trail in St. Charles County. The Centennial Greenway is to run along the rail trestle that is located just south of the Page Avenue, crossing the Woodson Road corridor between Trenton Avenue and Harney Road. It is important to provide connections for pedestrians and bicyclists to the future Centennial Greenway (and across Page Avenue) from the Woodson Road corridor.

**Bicycle Facilities**

Woodson Road is an important bicycle connection to Downtown Overland, Midland Boulevard, and the future Great Rivers Greenway Centennial Greenway. While the keypad polling conducted during the charrette showed that 67% of Overland’s residents feel “very safe” or “usually fine” walking on Woodson Road, this survey also revealed 54% of Overland residents either avoid biking on Woodson Road or would bicycle in the corridor if it were safer to do so. Only 39% of residents responded that they feel “very safe” or “usually fine” bicycling along Woodson Road.
Woodson Road is identified as a “shared route” by the current Gateway Bike Plan. From Midland Boulevard to Page Avenue the route is planned to be marked with lane markings as well as shared route signage. Currently, the markings and the signage do not exist. More information about the Gateway Bike Plan can be found at: http://greatriversgreenway.org/about-us/projects-in-partnership/gateway-bike-plan/. There are two bike racks located in the Downtown segment of the corridor, and one located in the neighborhood segment of the corridor, as well as one at the community center just outside the project limits. These and other existing and planned bicycle facilities in the vicinity of the corridor demonstrate a need to enhance bicycle facilities along Woodson Road.

St. Louis County has identified Midland Boulevard as a possible bicycle route and is considering installing bicycle lanes in conjunction with a road diet for portions of this route. The County is in early exploration of this concept and does not have a definite timeframe for any changes. Additionally, St. Louis County recently striped in bicycle lanes on Woodson Road from Olive Boulevard to the planned Centennial Greenway at the railroad trestle. These adjacent improvements provide opportunity to enhance connectivity with additional bicycle facilities on the corridor.

Moving Forward

During the charrette process it became clear that the residents of Overland want to attract quality development to their community and enhance quality of life. Many of the residents have lived in the area for a long time, and wish to regain the Overland feel, especially the downtown culture. Given the connections to the greater St. Louis region, Overland is attracting a younger population. With a central location in St. Louis County, Overland is ideally located. Transportation is a major component to community development and fostering a strong sense of place. Woodson Road should be a corridor that is safe and inviting for all users – pedestrians, bicyclists and motorists. The recommendations provided in this document help advance those goals and work toward fostering a strong, successful, resilient and healthy community.

Recommended Bicycle, Pedestrian and Transit Improvements

Recommendations for future improvements start with bicycle, pedestrian and transit improvements to enhance the environment for those travelling on Woodson Road by bicycle and foot. Recommendations for these improvements are intended to enhance safety, improve user experience, and promote a more mobile corridor.

Downtown Segment

These recommendations connect Midland Boulevard (a popular cycling route) to downtown Overland and to the greater Woodson Road corridor. They provide a way to bring in Midland Boulevard bicyclists to downtown Overland, for shopping, dining, experiencing the community, or any special events. These recommendations also improve downtown Overland for those driving or walking there. The land-use and architectural style of downtown, mixed with the pedestrian facilities, also promote an environment for walking from shop to shop. Thus our recommendations also include enhanced facilities for pedestrians. There are multiple improvements that can be made to enhance the experience for all visitors who visit downtown Overland.

- Overland Trailhead: The first recommendation is for a new bicycle trailhead to be located off of Verona Avenue, near the farmer’s market pavilion. 92% of residents responded that developing a bicycle trailhead “made sense” during keypad polling conducted during the charrette. The “Overland Trailhead” (a potential naming option) can be the
resting place for riders along Midland Boulevard or riding from Midland Boulevard, connecting through Overland, to the Centennial Greenway. This trailhead can also serve as a nice public space for families riding around the community, or any other cyclists and pedestrians moving through downtown. Trailheads typically offer some sort of water filling station, as well as signage about nearby amenities (restrooms, food locations, city services), and can even have interpretational signage about the history of the area. Implementing these amenities will encourage people to stop and see everything Overland has to offer. The Trailhead should have ample bike parking, so cyclists feel comfortable locking their bike and exploring downtown. At initial installation this could include 2 bike corrals to accommodate approximately 16 – 24 bikes. This added amount will work well with existing bike parking downtown for visitors to the farmers market and other attractions. However, once bicycling routes become more connected it will be important to monitor usage to understand if additional parking is needed. It is also important to include landscaping, shaded areas, benches, and a restroom stop. A preliminary design study should be undertaken to determine the likely cost for this project, which would likely be on the order of $100,000 to $250,000, excluding right-of-way needs.

- **Shared Lane Markings and Signage on Woodson Road:** The Gateway Bike plan identifies Woodson Road as a shared lane route. We recommend signage and striping changes to create a shared use facility along Woodson Road. These treatments can alert motorists to be aware of any cyclists in the corridor and also make bicyclists feel more comfortable using the roadway. Signage should indicate the ‘Bike May Use Full Lane’, and wayfinding signage should even indicate the mileage distances to different locations. This work should be able to be completed for less than $50,000.

- **Bump-outs on Woodson Road:** Currently there is one midblock bump-out on Woodson Road located near the Farmers Market Parking lot, and at a flashing beacon for pedestrians. To enhance pedestrian safety in the downtown segment, we recommend additional bump-outs for a higher level of pedestrian safety. These should be located at the curbs near an intersection, and will utilize about one parking stall where installed. However, as shown in the existing conditions, Woodson Road Corridor has plenty of parking on side streets and surface lots. Bump-outs enhance safety by increasing pedestrian visibility and shortening the crossing distance. Within the bump-out there is also the option for landscaping to further increase the pedestrian experience downtown. Bump-outs typically cost on the order of $50,000 to $100,000 per location.

- **Raised Intersection at the Farmers Market:** Currently the intersection at the Farmers Market with Woodson Road is marked with a crosswalk and a flashing beacon with a sign that reads “yield to pedestrians crossing”. Because this location is a high cross location for pedestrians moving to the Farmers Market, it is important to build upon safety to increase awareness of the crossing to motorists. We recommend installing a raised intersection at this location to slow traffic and enhance crossing visibility to motorists. In addition to enhancing safety, the raised intersection provides an option to install a decorative treatment to further the sense of place for Downtown Overland and create a more inviting experience to travelers on foot. Raised intersections typically cost on the order of $100,000 to $200,000 per location.
Verona as a Designated Bike Route (Quiet Street): With the location of the future Centennial Greenway just south of the Woodson Road Great Streets corridor, it is important to provide safe bicycle and pedestrian facilities to connect users to the future greenway as they travel through Overland. While some cyclists may feel comfortable riding on Woodson Road with traffic, others, including families with children, may not. Thus, we recommend highlighting Verona as a “quiet street” connection for cyclists looking for a quiet atmosphere. The trailhead used in conjunction with the quiet route can help draw people off the side street to downtown, and provide a resting place and community space. Treatments could be as simple as shared use striping and signage or could be enhanced to include traffic calming features such as bump-outs and/or speed humps/raised crosswalks. Wayfinding signage should also be included to help cyclists navigate. The example at the right is something that could be used in Overland highlighting Verona as the quiet route with directions for how to proceed to various locations. Depending on the design, the cost for this treatment could range between $25,000 and $250,000.

Bike Lanes on Lackland Road between Verona and Woodson Road, including treatments at the Lackland/Woodson intersection: With Verona serving as a quiet route through Overland, a safe facility is needed to move cyclists from Verona, through Lackland Road and back to the shared use path (recommended later in this section) for access to Woodson Road. We recommend installing bike lanes on Lackland so bikes are in a separated facility from the cars. These lanes will extend between Verona to Woodson. Additionally, we recommend installing a westbound bike box at the intersection of Lackland and Woodson, so bikes are given priority to turn left to the Woodson Road corridor and access the shared use path. A bike box is a protected facility that allows bikes to wait in the front of the vehicles with access to turn at the start of green signal. The example at the right is what this might look like. These treatments could cost on the order of $50,000 to $100,000 to install.

**Neighborhood and Convenience Service Segments**
The neighborhood and convenience Service segments of the Woodson Road Corridor currently have sidewalk facilities throughout the entire portion from Lackland Road to Brown Road. To enhance that facility and promote cycling within the corridor we have two recommendations to build upon the existing system. These transportation recommendations, in conjunction with other land use and environmental recommendations will help increase the atmosphere and experience within the neighborhood segment of the Woodson Road Corridor.

Shared Use Path for Families: Keypad polling conducted during the charrette revealed that 91% of residents desire some type of bicycle accommodation along Woodson Road and 57% specifically prefer a shared use path. Moreover, creating this path was identified as the 4th highest priority by keypad polling during the charrette. The current configuration of Woodson Road is wide enough to do some lane
reconfiguration and thus improve pedestrian and bicycle facilities outside of the roadway. We recommend reconfiguring the road with 10 foot lanes and using the extra width to construct a shared use path on the west side of the roadway. This improvement will create a safer and more comfortable pedestrian and bicycle atmosphere for residents of Overland. Street trees can provide shade cover on warm days, as well as serve as a buffer between the pedestrian and the vehicles. An example of the cross section above, indicating that in addition to the shared use path, shared lane markings will be striped on the road. This could be a rather expensive treatment that might be eligible for federal Transportations Alternatives Program (TAP) funds. A preliminary design study should be undertaken to determine the likely cost for this project, which would likely be on the order of $1,000,000 to $2,000,000, excluding right-of-way needs.

- **Shared Use Lanes on Woodson for Advanced Riders:** As indicated in the downtown segment discussion, some cyclists feel comfortable riding in traffic, and we want to include recommendations that provide a safe facility for those riders. Shared lane signage and markings would fulfill this need. This work should be able to be completed for less than $50,000.

**Woodson Road – Closure for Downtown Events**

The design team received a lot of positive feedback during the charrette process about the annual block party that is hosted in downtown Overland on Woodson Road. Woodson Road is closed to traffic between Lackland Road and Midland Boulevard for this event. Residents had great feelings about the Farmers Market as well, and recognize the potential to draw on crowds that come to downtown. In response to the keypad polling question during the charrette: “Would you be in favor of more large events that close Woodson Road from Lackland to Midland?” 77% of residents responded: “Yes, several times a year.” Having more people at large downtown events is one way for visitors to get to know downtown Overland, which boosts Overland’s neighborhoods and is good for local business.

The unique nature of the existing roadway system makes it relatively easy to close Woodson Road between Lackland Road and Midland Boulevard for these types of large events. This section of roadway could be closed more frequently for large events downtown. Reasons for this are described below.

- **Alternate Routes:** Brown Road creates a convenient by-pass of Woodson Road in downtown Overland. Brown Road connects at a traffic signal with Woodson Road to the south and at traffic signals at both Lackland Road and Midland Boulevard near downtown Overland.

- **Street Grid:** Overland’s street grid in provides opportunities for residents to access their neighborhood without using Woodson Road. Events need not be an inconvenience to the City’s neighborhoods.

- **Parking Access:** The street grid also provides access to most of the downtown parking even if the Woodson Road is closed for an event. The vast majority of parking is accessible from the side streets.

The City of Overland has experience with closing Woodson Road in the downtown area for special events, as well a history of past costs for necessary traffic control.
Intersections
In addition to corridor improvements by section, and special events, specific treatments for different intersections are also recommended to enhance safety and mobility.

Midland Boulevard
The intersection of Woodson Road/Midland Boulevard/Milton Avenue has been the subject of studies over the past several years. This is a 6 legged intersection that can be confusing to navigate. Multiple signal phases result in long cycle lengths and there are long crossing distances for pedestrians. As discussed previously, this is a high crash/injury location for both automobiles and pedestrians. Fixing this intersection was identified as the 2nd highest priority by keypad polling during the charrette.

The City of Overland conducted a Transportation Engineering Assistance Program (TEAP) study in 2009. This study explored various ways to improve the safety and efficiency of this intersection. St. Louis County expanded upon the TEAP study in 2012 (St. Louis County Project AR-1230). The St. Louis County study culminated in a presentation to the public in 2012 that recommended a roundabout intersection at this location but cut off access to Milton Avenue. The concept presented at that meeting is shown below. The public reaction to this alternative was mixed to unfavorable.

St. Louis County has continued to work on various concepts for this intersection since the 2012 public meeting in order to address the concerns voiced at this meeting. Additionally, during the charrette process design concepts from the previous
studies were reviewed to see if any warranted reconsideration. This review resulted in three basic concepts: (1) Make Improvements while Retaining Traffic Signal and Full Access to Milton, (2) Revised St. Louis County Roundabout Concept to Provides access to East Milton Avenue via Woodson Road, and (3) Create an Oval Intersection that Provides Access to all 6 legs of the Intersection. These concepts are discussed below.

Make Improvements to the Traffic Signal and Retain Full Access to Milton: Options are limited that improve the intersection while retaining both the traffic signal and full access to Milton Avenue. As can be seen in the drawing to the right, a few crosswalks can be shorted by using a more direct path and “skip-dash” striping can be used to better define vehicular paths through the intersection. In addition, there is a small section of raised or painted island that could be added on the eastern most corner of the intersection that would help to better define vehicle paths. Finally, St. Louis County could consider implementing leading pedestrian intervals into the traffic signal timing plans. These improvements could likely be put into place for less than $100,000.

Revised roundabout concept that provides access to East Milton Avenue via Woodson Road: The primary concerns with the intersection presented by St. Louis County in 2012 included: 1) the radius for traffic moving from northbound Woodson Road to eastbound Midland Boulevard needs to accommodate fire trucks, 2) access needs to be provided to E. Milton Avenue from Woodson Road, and 3) better access needs to be provided to the rear of the properties fronting Woodson on the south side of the intersection. St. Louis County modified the roundabout concept to address these concerns as is shown in the drawing to the left. St. Louis County completed an opinion of probable cost for these improvements as a part of their 2012 study and estimated that these improvements could likely cost on the order of $1,500,000 to $2,000,000 excluding right-of-way needs.
Another concept to reconfigure the intersection while allowing for all movements at the intersection is to provide an oval or "peanut" configuration as shown to the right. This intersection configuration would operate similar to a single lane roundabout and could provide an interesting gateway treatment into the downtown. A preliminary design study should be undertaken to determine the likely cost for this project, which would likely be on the order of $1,250,000 to $1,750,000, excluding right-of-way needs.

When weighing these options the City should holistically consider community priorities to establish what design is the best fit. It is important to remember how land use is affected, including potential development or redevelopment opportunities, as well as how this intersection moves pedestrians and bicycles, and how the intersection can potentially serve as a gateway treatment. We further recommend that a thorough study be conducted to analyze all of this information and gauge community feedback. This is a decision that needs to be made considering many factors and should be conducted with a rich public engagement process. Note, as shown in the figure to the left, the intersection has been configured with a circular island in the past (circa 1955).
**Lackland Road**

We recommend a traffic/geometric study be performed at the intersection of Lackland and Woodson. The current configuration has right turn lanes and “pork-chop” islands for the northbound, southbound, and eastbound approaches. The layout is acceptable for pedestrian crossings from an ADA standpoint. However, the hardscape creates an uninviting atmosphere for pedestrians, and offers no recognizable features you are entering downtown Overland. It may be possible to remove the right-turn lane and islands for one or more of these approaches, especially the southbound approach. The eastbound approach has relatively higher traffic volumes and the northbound island has a utility pole in it (increasing the costs of reconfiguration). Moreover, the eastbound and northbound right-turn lanes may be of value when Woodson Road is closed for downtown events. A detailed study is required to investigate the cost and feasibility of any of these changes. This study could cost on the order of $10,000 and would be eligible for MoDOT’s Transportation Engineering Assistance Program (TEAP). Finally, the City should also consider implementing leading pedestrian intervals into the traffic signal timing plans.

Also, as previously mentioned this study recommends bike likes on Lackland from Verona to Woodson as a part of the implementation of a quiet street concept on Verona. This would require bicycle treatments at the intersection of Lackland and Woodson to be determined based upon further design studies. As previously mentioned, these treatments could include a bike-box for westbound bicycle traffic.

**Flora Avenue**

Flora Avenue is the boundary of the neighborhood segment and the convenience service segment, and serves as an important point along Woodson Road. With the multi-family housing located on the west of Woodson road, and a shopping center located on the east of Woodson road, it also functions as an important pedestrian crossing. As illustrated to the right, we recommend a raised intersection to calm traffic and enhance pedestrian visibility. Additionally, the raised intersection can help serve as the gateway between segments, and a reminder to travelers they are approaching going in the right direction toward downtown. Raised intersections typically cost on the order of $100,000 to $200,000 per location.

**Brown Road**

Similar to the intersection at Midland Boulevard, the intersection at Brown Road is a potential place for intersection improvements. The existing intersection is configured with a significant skew and the southbound to eastbound movement is not permitted. We recommend a detailed analysis of the intersection, including the community goals and vision, and plans for future land use and development surrounding that intersection. It is also important to assess the functionality for pedestrians and bicyclists. This study should be an involved process, soliciting public input. The existing intersection is shown to the right.
Two concepts to reconfigure this intersection were developed during the charrette process (illustrated below): 1) 'T' up Brown Road with Romaine Avenue with a traffic signal and 2) reconfigure as a roundabout. Both concepts would “clean up” the intersection geometry and also allow for the closure of Miriam Avenue, Ridge Avenue, and Minerva Avenue (between Woodson Road and Leondale Avenue) for economic redevelopment opportunities. These closures would also improve the access management on this part of the corridor. A preliminary design study should be undertaken to determine the likely cost for these improvements, either of which would likely be on the order of $750,000 to $1,500,000 excluding right-of-way needs. Keypad polling during the charrette showed that 65% of the participants are in favor of realigning Brown Road with Romaine Avenue. These improvements would most likely only be implemented as a part of a significant redevelopment. St. Louis County would be a key partner/stakeholder in this effort.

Page Avenue
The primary focus at the intersection of Page Avenue and Woodson Road is to improve pedestrian and bicycle crossings. This intersection is a barrier for those wanting to cross Page Avenue to access jobs, service, shopping, and transit along Page Avenue, as well as the future Centennial Greenway. Keypad polling during the charrette showed that 92% of the participants feel that Page Avenue should be easier to cross for pedestrians and bicyclists. MoDOT would be a key partner/stakeholder in this effort. As illustrated in the figure below, improvements should be made in the following areas.

- Extend the shared use roadway signs and markings across Page Avenue and to the St. Louis County bike lanes starting near the rail trestle south of Page Avenue to visually cue motorists this is a cycling route.
- Complete the sidewalk (along the east side of Woodson Road) and the shared use path (along the west side of Woodson Road) between Brown Road and Page Avenue.
- Extend the shared use path on the west side of Woodson Road through and south of Page Avenue to connect with the future Centennial Greenway.
- Improve intersection crosswalks by narrowing lanes and widening/extending islands so that they can be used as pedestrian refuge areas as illustrated in the figure below.
- Consider implementing leading pedestrian intervals into the traffic signal timing plans.

A preliminary design study should be undertaken to determine the likely cost for these improvements, which would likely be on the order of $500,000 excluding right-of-way needs.
We also recommend consideration of a grade separated crossing of Page Avenue at this intersection. From preliminary field observations, it appears that a pedestrian tunnel may be feasible on the east side of the intersection in conjunction with a possible redevelopment of the northeast quadrant of the intersection. The grade of Page Avenue is significantly higher east of the intersection and the roadway grade is higher than the ground on the south side of the roadway (see photo to the right). While the costs for this improvement are undetermined (and it is likely to be a costly project) the feasibility should be explored as opportunities for implementation will be limited.
Transit Improvements

**Additional Service of the #66 Clayton – Airport Bus Line**: #66 Clayton – Airport only runs during peak commuter periods. However, this is the only bus that extends the entire length of Woodson Road and a strong desire to expand service on this line was expressed by the public during the charrette. We recommend working with Metro and St. Louis County to examine the routes and offer expanded service of this line.

**Summary Exhibits**
Summary exhibits of the existing conditions are provided in the following pages.
Woodson Road Great Streets
Environmental Infrastructure and Analysis

Introduction

This section will focus on environmental infrastructure issues and concepts related to the Woodson Road Great Streets project. The project boundary for the analysis includes approximately seventy-five acres along the Woodson Road corridor. The southern boundary of the project area is the Page Avenue intersection and the northern boundary is the Midland Blvd intersection. For the purposes of this discussion the project boundary was further subdivided into three zones separated by the following cross streets, Midland to Lackland (Downtown Zone), Lackland to Flora (Neighborhood Zone) and Flora to Page (Commercial/Service Zone). See illustration below for the zone locations.

Woodson Road Existing Conditions

1. Environmental / Utility Summary – The following is a brief discussion of environmental infrastructure related existing conditions along Woodson Road obtained from a review of background information and interviews during the charrette.

   a. Pervious/Impervious – An analysis of the existing pervious and impervious surfaces was completed within the seventy-five acre project boundary for Woodson Road. The calculation included a review of impervious paved and roof structures areas and pervious turf areas. The result of the investigation indicated that there was approximately 57 acres or 76% impervious and 18 acres or 24% pervious within the project boundary.

   Typical commercial areas across the nation have an impervious percentage of around 85% as compared to 75% for Industrial areas, 35% for Residential areas and 15% for Park areas. The percentage of impervious for the Woodson Road corridor is slightly below the average national Commercial area impervious percentage but that is not a statistic this area can be complacent about. Flooding has been identified as an issue in areas along Woodson Road. High percentages of impervious surfaces lead to more stormwater runoff that is concentrated in the storm sewers during heavy rain events leading to the potential for flooding.
See the table below for a breakdown of pervious versus impervious for each of the zones.

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</tr>
</tbody>
</table>
b. **Utilities** – Local utility companies Ameren, Laclede Gas and MSD who provide services in the area were interviewed to obtain information regarding issues and future projects.

i. **Ameren** – Existing overhead power lines are located on the east side of Woodson Road. The power lines include 34 Kv sub transmission lines, 12 Kv distribution lines, neutral lines and communication wires from AT&T and Charter. The wood power poles are inspected on a four year cycle. Some have been recently replaced. The lifespan of the poles is typically 30-50 years. Street lighting is provided by cobra head fixtures located on the power poles. Lighting is currently provided by high pressure sodium (HPS) lamps. Ameren is phasing out all of the HPS lamps and replacing them with LED. Only new street lighting and replacements of damaged lights will get LEDs at this time. Ameren indicated that they anticipate a three to five year schedule to replace the existing lamps with LED. Ameren owns the lights. Overland pays for the use and maintenance. No capacity or other electrical issues were identified.

ii. **Laclede Gas** – Laclede Gas was contacted regarding the project. They provided mapping of the existing gas lines along Woodson Road. There is an 8” gas line that runs along the east side of Woodson Road up to Trescott Avenue. North of Trescott Avenue the gas line size reduces to 6”. No issues or future projects were identified.

iii. **Metropolitan St. Louis Sewer District (MSD)** – MSD was interviewed and they provided mapping of the existing storm sewer and sanitary sewer lines in the study area. There are no issues with combined storm and sanitary sewer in this area. MSD has a project planned for construction in the fall of 2016. The Everman-Tennyson Storm Sewer project will add capacity with larger pipes. Construction is anticipated to take six months. A future sanitary sewer relief project between Flora and Trescott is on the books for construction in 2023. No other projects are planned due to lack of funding. MSD typically evaluates stormwater mitigation requirements on a project by project basis. They do not have established goals for pervious versus impervious areas. If a project disturbs over one acre then stormwater BMPs must be included. Information regarding stormwater management and guidelines can be found on the MSD website [http://www.stlmsd.com/what-we-do/stormwater-management/bmp-toolbox](http://www.stlmsd.com/what-we-do/stormwater-management/bmp-toolbox).

c. **Existing Lighting Levels** – An evaluation of existing light levels along Woodson Road was completed. A light meter was used to measure the foot candle output at the sidewalk and at the midpoint between street light posts. The foot candles recorded ranged from 0.0 to 6.1. Refer to the Existing Lighting map. The light color provided by the HPS was consistent along the street. Existing light levels in the downtown area were the highest followed by the Commercial/Service Zone. The only issue identified was the lack of light near a Metro Bus stop at the northeast side of the Lackland and Woodson intersection. Lighting in that area is supplied by cobra heads located on the traffic signal poles. Those lights were not functioning at the time of the readings in that area. We determined from discussions with Ameren that the City of Overland is responsible for those intersection lights. Overland was notified of this issue. Stakeholder input during the charrette identified a desire to have decorative pedestrian scale lighting in the downtown zone.
d. **Stormwater Issues** – Periodic flooding was identified as an issue in two areas through input from stakeholders and residents. Some of the commercial building owners on the north east side of Woodson Road in the Downtown zone have indicated that they occasionally have water in their basements which makes it difficult to rent the space. MSD provided sewer maps of that area which identified the inlet locations and pipe sizes. In the Farmers Market area there is only one area drain to accommodate a drainage area of impervious surfaces of over one acre. One 18” RCP and one 8” VCP drainage pipe carries the stormwater from the area drain to a 42” RCP. Due to the large drainage area and relatively small drainage pipes there may be a capacity issue in this area that could be contributing to water in basements in this area.

The other stormwater issue is located on the south part of Woodson Road near the intersection of Brown Road. The business located in that area, Woofie’s, has had issues with stormwater washing out mulch in beds on his property and the storm sewer inlet backing up resulting in water reaching his outdoor seating area. He replaced the mulch with large stones but is not satisfied with that condition. In this area, there is one area drain for an impervious area of approximately one half acre. The area inlet empties into a 72” RCP that is connected to all of the curb inlets on Woodson Road north to Theodosia. The flooding issue in this area could be attributed to limited capacity during heavy rain events. The curb inlets along Woodson are connected with 18” RCP. All of the cross streets from Theodosia going south and the parking lots of the commercial businesses in that area drain into Woodson Road. The periodic flooding issues were discussed with MSD during the charrette interview. The MSD engineer suggested that the business owners, residents and/or City of Overland needs to file a formal complaint with MSD and ask for an area engineer to come out to inspect the flooding issues. By filing a complaint MSD will have a record of the issue in their system and take necessary action.

e. **Vegetation** – The Woodson Road street tree planting is inconsistent along the corridor. Existing street trees are generally located in raised curb planter boxes in front of some properties both residential and business. Some of the raised planters and parking islands along Woodson Road have been planted with shrubs. That plant material includes both deciduous and evergreen species such as Japanese yews, junipers, boxwoods, burning bush, barberry and creeping euonymus. All but four trees that provide shade to the sidewalks on Woodson Road are located on private property. On the west side sidewalk only 1.3% of the pavement is shaded with trees. On the east side 2.6% of the pavement has shade provided by trees. This lack of shade is an issue due to the urban heat island effect which results from large areas of impervious surfaces like asphalt roads and concrete sidewalks absorbing heat from the sun and then gradually releasing that heat overnight. Research shows that the heat island effect can make an urban area 3-5 degrees hotter at night leading to increased electrical loads for cooling and increasing water consumption. Street trees can reduce the negative impact of the heat island effect through shade and through transpiration (cooling of the air temperature from evaporation of the water in the tree). The tree species that have been planted adjacent to the street include Bradford Pear, Pin Oak, Honey Locust, Golden Rain Tree and Amur Maple. Most of the trees show signs of environmental stress. The Oak trees are planted under the overhead power lines at the Wing Hing Trading Company. Their health is poor and they should be removed. Typically Oak trees grow too large to be placed near overhead power lines.

We heard from numerous stakeholders and residents that the existing raised planter boxes were not desired. When they were initially installed the beds and plant material looked great. Over time, the planters were not maintained on a regular basis. Shrubs have died and been removed leaving just mulch beds that tend to wash out in heavy rains and get full of weeds occasionally. Any new landscape development along Woodson Road needs to include a long term maintenance program.
2. Site Tour Observations

a. Downtown area which includes Woodson Road between Midland and Lackland Road has a visual character that includes store front facades, on street parking, red sidewalks, raised curb planter boxes with shrubs, and occasionally a bench and trash containers. The 83.4% impervious surface in the Downtown area is the highest of the three zones along Woodson Road. This negatively impacts both the stormwater runoff and the heat island effect. Impervious and dark colors of pavement absorb more heat (such as the red sidewalks in the downtown area) which can lead to increases in ambient temperatures. The heat island effect can negatively impact not only the energy resources to cool residences and businesses in the area but also have a negative impact on the health of the people in that area due to increases in the production of ground level ozone and smog.

Overhead utilities are located on the east side of Woodson. Signage in the downtown area is predominately regulatory and business identification. There is no consistency of signage which leads to visual clutter. The raised curb planters give some visual relief but there are only a few trees to provide shade and help with the heat island effect in the Downtown area. Not many of the plants in the planters have survived. Currently the main content in the planters is mulch. We heard from residents that the location of the planters adjacent to the parallel parking stalls limits passengers from opening their car doors or the car doors get damaged bumping the concrete curb of the planters. Environmental issues in this area include the large amount of impervious surface, overhead power lines, lack of vegetation and basement flooding. See below for some reference images from the Downtown area.

![Env Photo 1](image1.png)  
Env Photo 1 – Downtown Area view north. No street trees.

![Env Photo 2](image2.png)  
Env Photo 2 – Downtown Area view south. Raised planters and overhead utilities.
a. Neighborhood area which includes Woodson Road between Lackland and Flora Avenue is mostly residential buildings that include single family homes, duplexes and multifamily apartments. Commercial uses in this zone are concentrated at the Lackland intersection. Several other commercial uses are south of Trescott on the west side of Woodson. Both developments have large impervious surface parking lots. A United States Post Office facility is located within the Neighborhood zone just south of Palmer Street on the east side of Woodson Road. The large building is set back from the street on approximately 5 acres of land. The property is planted with trees and does not adversely affect the character of the Neighborhood Zone. A 0.89 acre parcel near Wabaday Road on the west side of Woodson is the only large open space in the corridor. Environmental issues in this area include overhead power lines, lack of consistent street tree planting and unmaintained planting boxes. See below for some reference images from the Neighborhood area.
b. **Commercial/Service** area which includes Woodson Road between Flora and Page Avenue is mostly automotive service shops, gas stations, commercial strip malls, medical offices and some eating establishments. The buildings are generally set back from the ROW with parking in front. The percent of impervious surfaces was calculated at 81.4% for this zone. The minimal street tree planting in this area is predominately located at a business however the trees are located under the overhead power lines and will be constant maintenance issues until the trees are removed or replaced with a smaller species. Stakeholders indicated that there was localized flooding in heavy rains in this area between Brown Road and Echo Road. During these flooding events water will rise over the curb on the west side of Woodson. Several storm sewer inlets are located in that area so we believe that there is a stormwater capacity problem that should be investigated by MSD. Environmental issues in this area include overhead power lines, lack of consistent street tree planting and prevalence of impervious surfaces. See below for some reference images from the Commercial/Service area.
3. Analysis
   a. Opportunities & Constraints – Through the review of the background data, input from City Officials, stakeholders and residents the following opportunities and constraints related to the Environmental Infrastructure were developed.

   **Opportunities**
   - Increase Shade with Street Tree Planting – Reduce heat island effect
   - Use of Native Plant material
   - Add Pedestrian Scale lighting Downtown
   - Consistent LED street lighting
   - Place overhead utilities underground
   - Reduce impervious pavement
   - Rain Gardens and bioretention areas to help with localized flooding issues
   - Use of Recycled materials in site furnishings
   - Sidewalk widening to facilitate non-motorized options

   **Constraints**
   - Overhead Power Lines
   - Ameren owns the Streetlights
   - High cost of underground utilities
   - Limited capacity of City for maintenance of green space
   - Limited ROW width
   - Numerous wide curb cuts reduce opportunities for street tree planting

   b. Best practices in Environmental Design for Great Streets – One of the goals of the EWG Great Streets program is to encourage environmentally responsible design in the development of Great Streets projects. The goal of the environmental infrastructure recommendations is to be based upon accepted science, to address a range of measurable elements, to be practical and to help make the street reflect the local identity. Typical environmental best practices fall into the following categories of improvements including increasing native vegetation, reducing noise pollution, reducing light pollution, improving stormwater management, facilitating non-motorized alternatives, reducing energy consumption and reduction of waste management. The aforementioned categories of environmental infrastructure improvements were considered for Woodson Road. The following discussion identifies the strategies suggested for the three zones within the project boundary.
4. **Goals/Vision**  
   a. Overview of Sustainable Strategies  
      i. **Downtown** – The downtown area is over 83% impervious from a combination of pavement areas and existing buildings. An overall reduction of impervious surfaces in this area can have numerous positive impacts by reducing stormwater runoff, increasing water infiltration, reducing pollutants in waterways, reducing heat island effect and improving air quality. In reviewing the existing conditions and potential alternatives for development in the future we believe that a 10% reduction in overall impervious is achievable and should be the goal in this area. This reduction can be achieved through various methods including blighted building demolition, pervious pavers, BMPs (green infrastructure) and parking reduction.

Within the ROW the primary focus to reduce impervious pavement is to convert the on street parallel parking areas to pervious pavement between the Farmer’s Market and Midland Ave. City owned parking lots behind the store fronts could also convert parking stalls to pervious to help reduce runoff and improve water quality. A hydraulic study is recommended to identify the quantity of water that would be infiltrated in a pervious paver system if installed in the parking areas. Installation and maintenance of pervious parking areas has its challenges and comes at a higher cost than other paving systems however the benefits to stormwater runoff, water quality and heat island effect are long term. A lower cost option is to replace parking stalls in the large parking lots behind the store fronts with turf or rain gardens. The stormwater could be directed to these areas by regrading the lots. The challenge of this option is the maintenance requirements of a rain garden especially during the establishment period.

To increase street tree planting, bumps outs could be developed within the ROW. Tree and groundcover plantings in the bump outs should be a native variety that can handle the urban environment. Native plantings are preferred for their ability to thrive in the climatic conditions in this area. A good source for information on native plant material for this area can be found on the Missouri Botanical Garden Website [http://www.missouribotanicalgarden.org/](http://www.missouribotanicalgarden.org/)

Addressing the overhead utilities in this area is important to the overall visual quality of the Downtown and the rest of Woodson Road. Options to address the overhead utilities include screening with low growing street trees, relocating the overhead utilities to a less visible area behind the store fronts or relocating the utilities underground. Information regarding trees and overhead utilities can be found on the Ameren website at [https://ameren.com/Transmission/transmission](https://ameren.com/Transmission/transmission) Ameren also published a document called *Planting Trees From the Ground Up: Your Guide to Planting the Right Tree in the Right Place* which contains details on tree species that are suitable near power lines.
Obviously, the most costly option is to place the utilities underground. This would be cost prohibitive for the entire Woodson Road corridor however placing a smaller section approximately 650 feet long underground in the Downtown area between Everman and Midland on the east side of Woodson would be desirable should the funds be available. To accomplish moving the overhead utilities to behind the buildings, according to Ameren, a 30 foot wide easement is required to accommodate access for service vehicle. Once the overhead utilities are relocated or placed underground then pedestrian scale LED lighting could be installed to add scale and provide opportunities for banners and hanging baskets to help foster the Overland identity. Refer to the Zone 1 - Downtown graphic below for an illustration of the strategy.
ii. **Neighborhood** – The goal of the environmental infrastructure strategy in the neighborhood area is to develop a consistent tree canopy. This will help to improve air quality, reduce heat island effect and increase property values. The tree canopy should be native species that tolerate urban conditions. To help facilitate non-motorized alternatives it is suggested that an eight foot wide shared use path be developed along the west side of Woodson Road. To implement this within the current ROW the existing traffic lanes on Woodson would be reduced to eleven feet wide and the western curb moved in towards the east.

This would create the space necessary to develop a four foot wide tree lawn between the curb and eight foot wide shared use path. The tree lawn could be developed with amended soils to improve stormwater runoff and water quality. Refer to the Zone 2 - Neighborhood graphic below for an illustration of the strategy.
1. Street Tree Planting
2. 8’ Shared Use Path
3. Decorative Speed Table
ii. **Commercial/Service Area** - The Commercial/Service area is over 81% impervious from a combination of pavement areas and existing buildings. An overall reduction of impervious surfaces in this area can have numerous positive impacts by reducing stormwater runoff, increasing water infiltration, reducing pollutants in waterways, reducing heat island effect and improving air quality. In reviewing the existing conditions and potential alternatives for development in the future we believe that a 5% reduction in overall impervious is achievable in this area. This reduction can be achieved through various methods including pervious pavers, BMPs (green infrastructure) and parking reduction.

A hydraulic study is recommended to identify the quantity of water that would be infiltrated in a pervious paver system if installed in the parking areas. Installation and maintenance of pervious parking areas has its challenges and comes at a higher cost than other paving systems however the benefits to stormwater runoff, water quality and heat island effect are long term.

In addition to reducing the impervious pavements another recommendation is to develop a consistent street tree canopy. This will help to improve air quality, reduce heat island effect and increase property values. The tree canopy should be native species that tolerate urban conditions. Refer to the Missouri Botanical Garden website for more information. [http://www.missouribotanicalgarden.org/](http://www.missouribotanicalgarden.org/) To help facilitate non-motorized alternatives it is suggested that an eight foot wide shared use path be developed along the west side of Woodson Road. To implement this within the current ROW the existing traffic lanes on Woodson would be reduced to eleven feet wide and the western curb moved in towards the east.

This would create the space necessary to develop a four foot wide tree lawn between the curb and eight foot wide shared use path. The tree lawn could be developed with amended soils to improve stormwater runoff and water quality.

The southern end of the Commercial/Service area has issues with periodic flooding. The City of Overland should work with MSD to identify and address the capacity issue that results in the street flooding. There is only so much the City can do regarding the impervious areas on private property. However, the City can encourage the use of permeable pavers and/or bioretention areas in parking lots to help reduce the runoff that enters the storm sewer system. Creating BMPs such as rain gardens out of a few parking spaces as well as developing a tree lawn between the parking lot and street will provide areas for the stormwater to infiltrate into the soil. More information on developing BMPs can be found on the MSD website [http://www.stlmsd.com/what-we-do/stormwater-management/bmp-toolbox](http://www.stlmsd.com/what-we-do/stormwater-management/bmp-toolbox) Maintenance of BMPs and other landscape areas can be an issue for Municipalities. If the maintenance is done by City staff then more training on BMP maintenance should be implemented. Another option would be to hire a contractor to do the maintenance that is paid for by the City or a fund that is created by the local businesses.
Refer to the Zone 3 – commercial/service area graphic below for an illustration of the strategy.
b. Community / City Admin Preferences – Input on the suggested environmental infrastructure strategies identified above was received via key pad polling and discussions with the community during the public meetings at the charrette. 60% of the respondents support the idea of burying the overhead utilities in the downtown area. There was also support for the idea of planted bump outs in that same area. In the Neighborhood area the attendees were asked if they approved of a bike/ped shared use path that would connect Woodson Road and the GRG Greenway south of Page Avenue. 83% of the respondents indicated that they thought it was a great idea. A question was asked regarding the street tree planting. 63% of the respondents would support the idea only if there is a maintenance strategy. Only 14% of the respondents indicated that the occasional flooding along Woodson Road is a significant problem.

5. Alternatives Considered

Several alternatives were considered for the suggested environmental infrastructure recommendations for Woodson Road Great Streets. To reduce impervious pavement and improve water quality pervious pavement is recommended. Alternatives exist for paving materials that will provide permeability. The recommendation is to take out asphalt and include pervious pavers in parking areas where possible. An alternative considered was the use of porous concrete in those parking areas. This material has started to be used more in the St. Louis area. It is better suited for pedestrian areas rather than vehicle traffic due to the way the concrete is poured which could lead to aggregate flaking off from vehicle tire turning movements. An example of the successful use of porous concrete in pedestrian areas is the South Grand Great Street development.

During the charrette interview with Ameren we discussed options to address the overhead utilities along Woodson Road. The Ameren representative indicated that the cost is very high to place utilities underground. We explored the possibility of relocating the power lines to a potential corridor behind the storefronts in the downtown area and businesses in the commercial/service area. Ameren indicated that if the lines were relocated then a 30 foot wide drivable easement would need to be cleared along the area of relocation. In reviewing the current development in the Woodson Road corridor there are several areas that appear to allow for an easement for the relocated utilities. The most benefit from the relocation would be in the downtown area. The power lines could be located in the parking areas behind the buildings. Another desirable option, if funds are available, is to bury a 650 foot section in the downtown area.

Landscape medians were considered for parts of Woodson Road to reduce impervious pavement and allow for additional street tree and landscape development. After discussions with the traffic planners and community it was determined that landscaped medians were not feasible due to the frequent curb cuts required vehicle turning movements along the corridor.

6. Environmental Infrastructure Recommendations

Phasing of Improvements/Estimate of Development Cost - During the charrette final public presentation the attendees were asked about their development priorities. The highest priority of the respondents was to revitalize the downtown area. An integral part of the revitalization of the downtown area is to reduce impervious surfaces which would be accomplished by selective building demolition and removal of asphalt. An environmental infrastructure priority for the Downtown area is to implement the pervious pavement and street tree planting. As funding is available then the overhead utilities could be placed underground. In the neighborhood zone and commercial/service zone the development priority is the street tree planting to help reduce the heat island effect of the pavement. The following is an order of
magnitude cost for the suggested improvements described above in 2016 dollars. If the project is built in future years then an inflation factor will need to be added to the costs.

EWG - Woodson Road - Great Streets Plan

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT OF MEASURE</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
<th>COST</th>
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<tr>
<td>Zone 1 - Downtown Area</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Site Earthwork &amp; Grading &amp; Demolition</td>
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<td></td>
<td></td>
<td>$2,390,058.50</td>
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Zone 2 - Neighborhood Area | | | | |
| Site Earthwork & Grading & Demolition | | | | |
| Demolition - Existing Sidewalk | Sq. Ft. | 10,898 | $25.00 | $272,450.00 |
| Demolition - Other Existing Pavement | Sq. Ft. | 17,398 | $30.00 | $52,194.00 |
| Paving | | | | |
| 8' Wide Concrete Shared Use Path | Sq. Ft. | 17,003 | $10.00 | $170,030.00 |
| Shared Concrete Speed Table | Sq. Ft. | 3,221 | $12.00 | $38,652.00 |
| Site Structures & Amenities | | | | |
| Wayfinding Signage | LS | 1 | $10,000.00 | $10,000.00 |
| Plant Material | | | | |
| Street Tree | Each | 23 | $350.00 | $8,050.00 |
| Amended Soil | CY | 313.0 | $40.00 | $12,520.00 |
| SUBTOTAL | | | | $262,247.50 |

Zone 3 - Commercial / Service Area | | | | |
| Site Earthwork & Grading & Demolition | | | | |
| Demolition - Existing Sidewalk | Sq. Ft. | 9,088 | $25.00 | $227,200.00 |
| Demolition - Other Existing Pavement | Sq. Ft. | 12,317 | $30.00 | $369,510.00 |
| Paving | | | | |
| 8' Wide Concrete Shared Use Path | Sq. Ft. | 16,542 | $10.00 | $165,420.00 |
| Site Structures & Amenities | | | | |
| Gateway Feature | LS | 1 | $75,000.00 | $75,000.00 |
| Wayfinding Signage | LS | 1 | $10,000.00 | $10,000.00 |
| Plant Material | | | | |
| Street Tree | Each | 19 | $350.00 | $6,650.00 |
| Amended Soil | CY | 282.0 | $40.00 | $11,280.00 |
| SUBTOTAL | | | | $287,744.00 |
| SUBTOTAL ZONES 1, 2, & 3 | | | | $2,840,059.00 |
| Contractor Contingency | % | 1% | | $29,400.00 |
| Construction Layoff | % | 1% | | $29,400.00 |
| Mobilization | % | 0% | | $29,400.00 |
| Project Contingency | % | 20% | | $588,000.00 |
| TOTAL | | | | $3,822,065.00 |

Note - Other project costs can be estimated at a percentage of the construction budget. See below.
- General and Administrative Engineering: 1% | $29,400.00
- Survey: 1% | $29,400.00
- Design and Drafting Services: 3% | $588,000.00
- Construction Period Services: 3% | $117,692.00
- TOTAL: $445,007.50