CITY OF SANTA CLARITA
Pavement Preservation Program
PRESENTATION OUTLINE

• Fast Facts
• City’s Road System and PCI Information
• Street Selection Process
• Approach to Pavement Preservation
• Public Outreach
• Questions / Comments
CITY OF SANTA CLARITA
Fast Facts

- Incorporated on December 15, 1987
- 3rd Largest City in LA County
- Population 219,130
- Santa Clarita spans 64.4 square miles
- Approximately 516 Centerline Miles of Paved Roads
- 4 communities
- 1.22 Billion City Asset
- StreetSaver Inventory Tool
City’s Road System Overview and PCI Information
Maintained Road System by Functional Class

<table>
<thead>
<tr>
<th>Functional Classification</th>
<th>Centerline Miles</th>
<th>Pavement Area (sq. ft.)</th>
<th>Percent of System</th>
<th>Average PCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial</td>
<td>134.5</td>
<td>28,733,092</td>
<td>29.2</td>
<td>63</td>
</tr>
<tr>
<td>Collector</td>
<td>112.4</td>
<td>24,247,233</td>
<td>24.6</td>
<td>68</td>
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<tr>
<td>Residential</td>
<td>231.9</td>
<td>42,929,961</td>
<td>43.6</td>
<td>67</td>
</tr>
<tr>
<td>Trails</td>
<td>36.8</td>
<td>2,503,799</td>
<td>2.5</td>
<td>81</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>515.6</strong></td>
<td><strong>98,414,085</strong></td>
<td><strong>100%</strong></td>
<td><strong>67</strong></td>
</tr>
</tbody>
</table>
# Maintained Road System by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Centerline Miles</th>
<th>Pavement Area (sq. ft.)</th>
<th>Percent of System</th>
<th>Average PCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterials</td>
<td>134.5</td>
<td>28,733,092</td>
<td>29.2</td>
<td>63</td>
</tr>
<tr>
<td>Canyon Country</td>
<td>113.6</td>
<td>22,069,207</td>
<td>22.4</td>
<td>64</td>
</tr>
<tr>
<td>Newhall</td>
<td>46.4</td>
<td>9,307,719</td>
<td>9.5</td>
<td>75</td>
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<tr>
<td>Saugus</td>
<td>78.2</td>
<td>14,422,297</td>
<td>14.7</td>
<td>67</td>
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<tr>
<td>Valencia</td>
<td>106.1</td>
<td>21,377,971</td>
<td>21.7</td>
<td>66</td>
</tr>
<tr>
<td>Trails</td>
<td>36.8</td>
<td>2,503,799</td>
<td>2.5</td>
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</tr>
</tbody>
</table>
## Breakdown of Total System by PCI Range

<table>
<thead>
<tr>
<th>Condition</th>
<th>PCI Range</th>
<th>Percentage of Total</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>100-91</td>
<td>14.72</td>
<td>14,484,665</td>
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<tr>
<td>Good</td>
<td>90-71</td>
<td>39.56</td>
<td>38,935,595</td>
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<tr>
<td>Fair</td>
<td>70-51</td>
<td>16.61</td>
<td>16,351,145</td>
</tr>
<tr>
<td>Poor</td>
<td>50-31</td>
<td>21.85</td>
<td>21,503,884</td>
</tr>
<tr>
<td>Failed</td>
<td>30-0</td>
<td>7.25</td>
<td>7,138,798</td>
</tr>
</tbody>
</table>
Pavement Management Goal

Increase the City’s overall PCI from 64 to 70 within five years by expanding and implementing pavement preservation techniques.
• Develop an unbiased, standardized street selection process
• Increase public outreach efforts
• Sustainable treatments
• Incorporate preventative maintenance treatments
• Cover more Area for the Dollar
• Public Convenience
Pavement Condition Trend

- Pavement Management Update (StreetSaver)
City’s Street Selection Process
Prioritizing Strategy

Budget

Annual street rehabilitation and maintenance budget

45% Collector and Residential Streets

45% Arterial Streets

10% Contingency Streets
Arterials Strategy: 45% from Original Budget

FIVE YEAR PAVEMENT PLAN

15% Preventative maintenance

STEP 1: ADT score + WER score = priority score (lowest to highest)

STEP 2: Grouped by geographic location

Street list

85% Rehabilitation and/or maintenance

STEP 1: ADT score + PCI score = priority score (lowest to highest)

STEP 2: Grouped by geographic location

Street list
Collectors and Residential Strategy: 45%

STEP 1: Group streets by evaluation zone
STEP 2: Calculate costs based on five-years needs
STEP 3: Sort by weighted effectiveness ratio of evaluation zones

- Trails list by zone
- Newhall list by zone
- Saugus list by zone
- Valencia list by zone
- Canyon Country list by zone
City’s Approach to Pavement Preservation
City’s Approach for Pavement Preservation

- Slurry Seal
- Micro Surfacing
- TMO
- CIR
- FDR
- Conventional Mill & Fill
- Overlay
Pavement Preservation Timing

Deterioration curve is determined by loading, pavement quality, climate, etc.
Pavement Condition vs. Maintenance / Rehabilitation Cost
Good Pavement Management

• **Best-First “Top Down” Management:** focuses maintenance and rehabilitation on the best streets in the system. Interim procedure.

• **Worst-First “Bottom Up” Management:** focuses maintenance and rehabilitation on the worst streets in the system. Interim procedure.

• **Critical-Point Management:** focuses maintenance and rehabilitation on streets above rather than below a critical PCI. Most economical in the long run.
Applying the **RIGHT TREATMENT**
to the **RIGHT PAVEMENT**
at the **RIGHT TIME**
using the **RIGHT MATERIALS**
Pavement Condition vs. Maintenance / Rehabilitation Cost

**Pavement Condition Index (PCI)**

- **Trigger Overlay**
  - 30 Years: $2.38/SF
  - 50 Years: $6.11/SF

**Maintenance by Critical PCI**

- **26 Years**: $3.89/SF
- **46 Years**: $11.67/SF

**MAINTENANCE BY WORST FIRST**

Assumes a typical local/residential road properly designed and constructed for a traffic index of 5.0.

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*Image provided courtesy of Pavement Engineering Inc.*
Slurry Seal
Slurry Seal
Micro Surfacing
Micro Surfacing
Micro Surfacing
Micro Surfacing
Micro Surfacing
Micro Surfacing
Public Outreach

Web Page - www.Santa-Clarita.com/Resurfacing

- Infographics of each treatment
- Photographs
- Helpful Tips
- News and Media links
- Contact information
- Clickable maps with Streets and dates
- FAQ
Questions?

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