PAVEMENT PRESERVATION
AND
CAPE SEAL SUCCESS
IN SANTA BARBARA COUNTY

presented by
Scott McGolpin and Kevin Donnelly
“There are risks and costs to a program of action. But they are far less than the long-range risks and costs of comfortable inaction.”

John F. Kennedy
35th president of US 1961-1963 (1917 - 1963)
Presentation Overview

• Evolution of Pavement Preservation in SB County
  • Worst first vs. Pavement Preservation Strategies
  • Measure D
  • Dedicated Funding Sources for Transportation

• Challenges
  • Political Buy-in
  • Public Perception
  • Long Term Funding Streams

• Road Maintenance Annual Plan (RdMAP)
  • Workshops and Community Outreach

• Cape Seal Success
• Benefits of Pavement Preservation
Evolution of S.B. County’s Pavement Preservation Program

Pre 1989

- “Worst First” Philosophy
  - Focused on the “Squeaky Wheel”
  - Little cost savings due to small project / contract sizes

- Window assessment of pavement condition

- Regional approach based on road yard Superintendents requests and phone calls to Supervisors

- Internal lack of communication due to no network level / budget / cost effectiveness planning

- Funding based on limited sources
Evolution of S.B. County's Pavement Preservation Program

After 1989

- Measure ‘D’ approved by voters in 1989
  - Dedicated funding stream for transportation maintenance needs

- Pavement Management System implemented
  - Network inventory, roadway assessment, work history

- Internal processes defined to increase communication
Evolution of S.B. County’s Pavement Preservation Program

Preventive Maintenance - 1995

- Road Maintenance Annual Plan (RdMAP) developed
  - Sets priorities and documents annual work
  - Educates decision makers, the public and various stakeholders

- Preventive Maintenance Philosophy adopted

- $’s focused on maintaining our taxpayers investment in transportation infrastructure
Evolution of S.B. County’s Pavement Preservation Program

Pavement Preservation - 1999

**Corrective Maintenance**
- Strategically deployed forces to compliment the preventive maintenance program

**Preventive Maintenance**
- Changed Pavement Management Systems
  - New Software has:
    - Inventory and condition rating
    - Deterioration models / condition analysis tools
    - Powerful budget planning / need assessment tools
    - Work planning / work history

- New system allows the County to focus on cost benefit and service life

- Individual roadway treatments selected based on individualized field inspections
Pavement Preservation

PMS Recommendations
• Based on Work History, Inspections & PCI

Field Assessment

Right Treatment, Right Time, Right Road.
PCI Trend in SB County

Storm Events

Investment

PCI
Challenges

• Political Buy-in
  » Educate County Decision Makers
  » Inclusive Process through RdMAP

• Public Perception
  » Educate public through community outreach; video presentations on Pavement Preservation, Annual workshops and neighborhood meetings

• Long Term Funding Streams
  » Dedicated funding streams for transportation needs
  » State / Federal dedicated funding
S.B. COUNTY'S SYSTEM:

1,667 Lane miles of asphalt pavement

110 Major bridge structures

48 Traffic signals throughout the County

Over 15,000 street trees

Concrete hardscape improvements

Over 4,100 drainage facilities
RdMAP PLANNING PROCESS:

IDENTIFY NEEDS
- Pavement Management System
- Bridge Management System
- Engineering Analysis
- Traffic Control Maintenance
- Maintenance Programs
- Minor Projects
- Environmental Review

SET ROAD MAINTENANCE PRIORITIES
- Develop DRAFT Annual Plan

DISTRICT PRESENTATIONS
GATHER PUBLIC INPUT

DEVELOP FINAL DRAFT ANNUAL PLAN

BOARD OF SUPERVISORS ADOPTION
OF FINAL ANNUAL PLAN

JANUARY '07

MARCH '07

March 28, 2007

1st District
2nd District
3rd District
4th District
5th District
“To know the road ahead, ask those coming back.”

Chinese Proverb
### S.B. County’s Pavement Preservation Toolbox

<table>
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<tr>
<th>Treatments</th>
<th>PCI</th>
<th>Use on</th>
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</thead>
<tbody>
<tr>
<td>Rejuvenating Fog Seal</td>
<td>70-100</td>
<td>Sound structural section</td>
</tr>
<tr>
<td>Slurry Seal</td>
<td>60-80</td>
<td>Sound structural section</td>
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<tr>
<td>Micro Surfacing</td>
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<tr>
<td>Scrub Seal</td>
<td>50-70</td>
<td>Sound structural section</td>
</tr>
<tr>
<td>Scrub Cape Seal</td>
<td>25-70</td>
<td>Fairly sound structural section</td>
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<tr>
<td>ARAM</td>
<td>40-70</td>
<td>Fairly sound structural section</td>
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<tr>
<td>SAMI - 3 layer system</td>
<td>20-50</td>
<td>Partially failed structural section</td>
</tr>
<tr>
<td>Recycles</td>
<td>10-40</td>
<td>Partially failed structural section</td>
</tr>
<tr>
<td>Reconstruction</td>
<td>0-10</td>
<td>Failed structural section</td>
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Prior condition of typical county residential roadways selected for scrub seal with Type 2 micro surfacing.
County residential roadway completed with scrub seal and Type 2 micro surfacing treatment.
Utilizing a polymer modified asphalt rejuvenating emulsion and Micro surface, this application was applied to distressed roadways with PCI’s between 35 and 60.
Rural county arterial roadway, Harris Grade Road, after scrub seal and Type 2 micro surfacing treatment.

Type 2 micro surfacing being applied by Intermountain Slurry Seal over scrub seal.
THANK YOU

PAVEMENT PRESERVATION

AND

CAPE SEAL SUCCESS

IN SANTA BARBARA COUNTY