Successful Revenue Generators for Pavement Management and Pavement Preservation

Presented By:
Lenny Hulme – Transportation Department Director – City of Mesa
Matt Manthey – Pavement Management Management Supervisor – City of Mesa
Brief History of The City of Mesa’s Revenue for Street Maintenance

- Primary source of funding – HURF
- Other funding - ???????
- Reconstruction/CIP project funding – Bonding against HURF
  - Leads to further debt payback
  - Reduced HURF funds overtime
- How do we get consistent & continual revenue for Street Maintenance?
- A Place to start
- Show the bigger picture
- Outline the need
- Set a baseline scale of acceptance
- Present the future consequences
Good
Access: LY06A to LY06B
All Councils

LY06A    Group: LY06
LINDSAY RD from BROWN to ADOBE

Lanes: 5
Length: 2,420
Width: 66
Area: 17,747
District: 1 Council: 2
Traffic: C 14300

PCI History
Arterial

Built:
Annexed:
Added: 01/01/1993
Surface: AC
SubGrade: 0
Base: 0

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November 20, 2014
Street Maintenance

- Street Sweeping
- Seal Coats
- Maintenance Mgmt
- R-O-W Maint. & ER
- Pavement Mgmt
- Concrete & AC Repairs
- Storm Drain
- Landscaping

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## Collector/Residential Streets

<table>
<thead>
<tr>
<th>Year of Treatment</th>
<th>Type of Treatment</th>
<th>Estimated Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Year</td>
<td>New Construction</td>
<td>$18.00/Sq.Yd.</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Year</td>
<td>Fog Seal</td>
<td>0.25/Sq.Yd.</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Fog Seal</td>
<td>0.25/Sq.Yd.</td>
</tr>
<tr>
<td>8&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Crack Seal</td>
<td>0.30/Sq.Yd.</td>
</tr>
<tr>
<td>9&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Slurry Seal</td>
<td>1.00/Sq.Yd.</td>
</tr>
<tr>
<td>12&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Fog Seal</td>
<td>0.25/Sq.Yd.</td>
</tr>
<tr>
<td>16&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Crack Seal</td>
<td>0.30/Sq.Yd.</td>
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<tr>
<td>17&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Slurry Seal</td>
<td>1.00/Sq.Yd.</td>
</tr>
<tr>
<td>20&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Fog Seal</td>
<td>0.25/Sq.Yd.</td>
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<tr>
<td>24&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Crack Seal</td>
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<tr>
<td>25&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Slurry Seal</td>
<td>1.00/Sq.Yd.</td>
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<tr>
<td>28&lt;sup&gt;th&lt;/sup&gt; Year</td>
<td>Fog Seal</td>
<td>0.25/Sq.Yd.</td>
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<tr>
<td>32&lt;sup&gt;nd&lt;/sup&gt; Year</td>
<td>Major Rehabilitation</td>
<td>$15 to $18/Sq.Yd.</td>
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</table>
Annual Expenditures Percentages

- Seal Coating: 27%
- Parkway Maintenance: 22%
- Seal Coating: 8%
- Alley Maintenance: 2%
- Street Cleaning: 14%
- Street Repair: 20%
- Sidewalk Repair: 7%
### Maintenance of Transportation Facilities/Year

<table>
<thead>
<tr>
<th>Street Element</th>
<th>Local Street</th>
<th>Local Collector</th>
<th>Mid-section Collector</th>
<th>4-Lane Arterial</th>
<th>4L Arterial &amp; Median</th>
<th>6-Lane Arterial</th>
<th>6L Arterial &amp; Median</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Pavement</td>
<td>$2,992.00</td>
<td>$3,520.00</td>
<td>$4,048.00</td>
<td>$5,984.00</td>
<td>$4,928.00</td>
<td>$7,744.00</td>
<td>$6,864.00</td>
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<tr>
<td>Sweeping</td>
<td>$715.00</td>
<td>$715.00</td>
<td>$715.00</td>
<td>$1,768.00</td>
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<tr>
<td>Median Sweeping</td>
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<td>$2,900.00</td>
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<tr>
<td>Landscaping</td>
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<td>$0.00</td>
<td>$14,573.00</td>
<td>$32,314.00</td>
<td>$39,283.00</td>
<td>$19,642.00</td>
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<tr>
<td>Storm Drainage</td>
<td>$500.00</td>
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<td>$500.00</td>
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<td>$500.00</td>
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<tr>
<td>Signals</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$15,000.00</td>
<td>$15,000.00</td>
<td>$15,000.00</td>
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<tr>
<td>Street Lights</td>
<td>$4,676.00</td>
<td>$4,676.00</td>
<td>$4,676.00</td>
<td>$4,676.00</td>
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<td>Signs</td>
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<tr>
<td>Striping</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,109.00</td>
<td>$2,217.00</td>
<td>$1,478.00</td>
<td>$2,956.00</td>
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<td>Bus Shelters</td>
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<td>$0.00</td>
<td>$400.00</td>
<td>$400.00</td>
<td>$400.00</td>
<td>$400.00</td>
<td>Cleaning and inspections</td>
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<tr>
<td>Curbs</td>
<td>$105.00</td>
<td>$105.00</td>
<td>$105.00</td>
<td>$105.00</td>
<td>$210.00</td>
<td>$105.00</td>
<td>$210.00</td>
<td>general repairs, cracks, etc.</td>
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<tr>
<td>Sidewalks</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$500.00</td>
<td>general repairs, cracks, etc.</td>
</tr>
<tr>
<td>Cost/Mile</td>
<td>$9,828.00</td>
<td>$10,356.00</td>
<td>$26,566.00</td>
<td>$63,804.00</td>
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<tr>
<td>Cost/Foot</td>
<td>$1.86</td>
<td>$1.96</td>
<td>$5.03</td>
<td>$12.08</td>
<td>$13.63</td>
<td>$10.16</td>
<td>$11.50</td>
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</tbody>
</table>

Note: Costs are calculated at $.15 per square yard for pavement maintenance, $55/mile/residential @ every four weeks; $68.00/mile/arterial @ every other week for sweeping, $2900 per mile for median sweeping, $.12 per sq. ft. for landscaping, $500 per mile for storm drainage, $3/mile; $5,000/signal per year for signals, $89.92/pole per year; 26 poles/mile for street lights, 1 sign/300'; 34 signs/mile; replace every 5 years; $50/sign for signs, $.07 per linear foot for striping, cleaning and inspections for bus shelters.
Sales Tax

Capital Match for New Construction $40.3 mil
Pavement Replacement $24 Mil  

Pavement Repair $3 Mil
Pavement Preservation $20.2 Mil   Street Lighting Repairs $2.2
Concrete Repairs $1.3 Mil

Traffic Operation Enhancements $4.7 Mil
Pavement Condition Index

PCI Trend

Minimum Desired PCI

Year


PCI

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Pavement Condition Index

PCI Trend

Minimum Desired PCI

Sales Tax Initiated

Arterial Streets


Year

PCI

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Maintenance Management

- Computerized Inventory
  - History
  - Treatment Schedules
  - Forecasting
- Mapping
City of Mesa Transportation Department FY13/14 Adopted Budget

Total Budget=$54.7M

- Transportation Sales Tax: 53%
- Highway User Revenue Funds: 36%
- Environmental Compliance Fee: 8%
- Enterprise Fund: 2%
- General Fund and Other Govt Funds: 1%

Progress so far...

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Continued progress…

City of Mesa Transportation Department FY14/15 Adopted Budget

Transportation Sales Tax 50%

Highway User Revenue Funs 38%

Environmental Compliance Fee 9%

Enterprise Fund 2%

General Fund and Other Governmental Funding 1%

Total Budget = $55.5M

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