City Wide Pavement Management System

IMS Pavement Analysis Results And Peachtree City Asset Inventory
P.A.C.E.S. vs IMS Pavement Data Collection

P.A.C.E.S.
- Subjective visual rating based on roadway distresses.
- Representative Sampling

Pavement Condition Index, (PCI) ranges from 0 to 100 based on visual inspection.

IMS Pavement Data Collection
- Observations to determine Surface Distress Index (SDI).
  ASTM D6433
- Calculates the Roughness Index (RI) of the roadway.
  ASTM E1926 – 08
- Calculates the Strength Index (SI) of the Roadway.
  ASTM D4694
- All Roadways Segments are Inspected.

Note: 2014 PACES Average Rating PCI- 81

Weighted Pavement Condition Index, (PCI) ranges from 0 to 100 based on the Indexes noted.
City of Peachtree City, GA

Network Valuation (Asset, $M, %)

- **C&G & Drainage, 65.2, 32%**
- **Pavements, 39.6, 19%**
- **Subgrade & Base, 66.6, 32%**
- **Sidewalks & Ramps, 12.2, 6%**
- **Signs & Striping, 2.4, 1%**
- **Landscaping, 1.7, 1%**
- **Miscellaneous, 18.8, 9%**

**Total Mileage = 192.8 Miles**
**Total Network Valuation = $206.5M**
**Value Per Mile = $1.07M/Mile**
## Peachtree City Roadway Assets

<table>
<thead>
<tr>
<th>Items</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavements</td>
<td>Miles</td>
<td>192.8</td>
<td>$205,394</td>
<td>$39,600,000</td>
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<tr>
<td>Subgrade</td>
<td>Miles</td>
<td>192.8</td>
<td>$345,436</td>
<td>$66,600,000</td>
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<tr>
<td>Signs</td>
<td>Each</td>
<td>4860</td>
<td>$275</td>
<td>$1,336,500</td>
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<tr>
<td>Double Yellow</td>
<td>Miles</td>
<td>80</td>
<td>$5,280</td>
<td>$422,400</td>
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<tr>
<td>Yellow Single</td>
<td>Miles</td>
<td>9.6</td>
<td>$5,280</td>
<td>$50,688</td>
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<tr>
<td>White Single</td>
<td>Miles</td>
<td>61</td>
<td>$5,280</td>
<td>$322,080</td>
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<tr>
<td>Stop Bars</td>
<td>Each</td>
<td>308</td>
<td>$75</td>
<td>$23,100</td>
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<tr>
<td>Crosswalks</td>
<td>Each</td>
<td>257</td>
<td>$1,200</td>
<td>$308,400</td>
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<tr>
<td>Curb/Gutter</td>
<td>Miles</td>
<td>353</td>
<td>$184,800</td>
<td>$65,234,400</td>
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<tr>
<td>Sidewalks and Ramps</td>
<td>Lump</td>
<td>1</td>
<td>$12,200,000</td>
<td>$12,200,000</td>
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<tr>
<td>Landscape</td>
<td>Lump</td>
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<td>$1,700,000</td>
<td>$1,700,000</td>
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<tr>
<td>Miscellaneous</td>
<td>Lump</td>
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<td>$18,800,000</td>
<td>$18,800,000</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$206,597,567.71</strong></td>
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</tbody>
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**Peachtree City Assets**
Seal Coats & Thin Lifts (30%)

2"Mill & Pave (19.8%)

Mill, Patch, & Pave (39.5%)

Full Depth Reclamation (FDR) (9.7%)
Impact of Residential Waste Haulers on Asphalt Pavement

- Year 15 Cost to Repair: 209k-342k
- Year 15 Cost to Repair: (152k) $152,900/Mile
- Cost to Repair 209k-342k $320,700/Mile
- Year 15 Cost to Repair: 152k $342,000/Mile

Legend:
- Typical Pavement Performance Curve 1-Trash Provider with Recycle
- 2- Trash Providers with Recycle
- 3- Trash Providers with Recycle
Current Annual Funding Sources

SPLOST
- Resurfacing- $3,747,116
- Seal Coating- $326,663

General Fund for Paving
- Resurfacing- $1,800,000

Total Funds= $5,873,779
+/-5% Allocated to Signage, Striping, and Misc. (Estimated)

Resurfacing & Seal Coating ≈ $5,580,000
<table>
<thead>
<tr>
<th></th>
<th>Annual Budget (5 Yr)</th>
<th>Ending PCI (5yr)</th>
<th>Ending Backlog (5 Yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fix All</strong></td>
<td>$9,007,600</td>
<td>86</td>
<td>0.20%</td>
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<tr>
<td><strong>Current Funding</strong></td>
<td>$5,580,000</td>
<td>72</td>
<td>8.20%</td>
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<td><strong>IMS Recommended Minimum</strong></td>
<td>$4,830,000</td>
<td>69</td>
<td>11.70%</td>
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<tr>
<td><strong>General Fund Only</strong></td>
<td>$1,800,000</td>
<td>57</td>
<td>28.70%</td>
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<tr>
<td><strong>Do Nothing</strong></td>
<td>$0</td>
<td>50</td>
<td>37.10%</td>
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</tbody>
</table>
Roadway Paving Determination

City of Peachtree City, GA

Current Pavement Condition Index (PCI) Distribution by Area

Current Network Average Condition = 61, Backlog = 9.7%

- 18.7% in 40 to 50 range
- 20.8% in 50 to 60 range
- 19.8% in 60 to 70 range
- 13.6% in 70 to 80 range
- 12.1% in 80 to 90 range
- 5.6% in 90 to 100 range

- Attack Critical Segments to Prevent Falling into More Costly Rehabs
- Seal Coats

Current Budget will Reduce the Backlog
Questions?
(Show Map Viewer)
**Kedron Drive-Thin Lift or HA5?**

**HA5**
- Traffic Control
- Tack Coat
- Crack Fill
- Surface Patching

$8.50 Per SY  
Kedron= $34,446

**Thin Lift Asphalt**
- Traffic Control
- Tack Coat

$5.60 Per SY  
Kedron= $22,680