CITY OF MILWAUKEE
HIGH IMPACT PAVING
PROGRAM (HIPP)

WAPA CONFERENCE 2016

Ghassan Korban, P.E.
Commissioner, Department of Public Works
City of Milwaukee
Miles of Roadways

Within City limits
City/County/State
1,687 miles
1,270 miles (City Maintained)
City Maintained Streets

% Lane-miles Road Network

- Major Arterial: 67%
- Minor Arterial: 7%
- Collector: 20%
- Local: 6%
Creation of HIPP in 2012

- Current approach was not producing satisfactory results
- $1M reallocation from local street paving program in 2013 budget
- Pilot maintenance program
HIPP – Approach

- Mill 2+ inches and place 2+ inches of Asphalt
- Minimal or no Engineering/Soft Costs
- Limit work to 2–3 days per location
- Engage BIDs or Associations
- Document pre-existing conditions
- Improve Lane configurations
  - Add bicycle lanes
  - Reduce lane width or number
  - Improve Safety features
HIPP – Selection Criteria

- Focus on high volume Arterials
- Fair condition pavement
- Sub-base is in a average condition
- Sidewalk and curb & gutter also is in average or good condition
HIPP – Sample candidates

E. Michigan St

E. Kilbourn Ave
Basis for Approach
Oakland Ave
HIPP has become popular!
Mayor Tom Barrett a supporter and advocate:
  “Extreme Make-Over, the Milwaukee Edition”
Council members very supportive… the “Hip” Program
Started with downtown streets in 2013, Now citywide program!
Businesses and residents are satisfied:
  Improved conditions
  Quality ride
  Efficient process
Goals Met and Program Grew

- 2013: $1 million for 3.6 miles
- 2014: $3 million for 9 miles
- 2015: $7 million for 22 miles
- 2016: $8 million for 28 miles, included some residential streets. (Favorable bids)
- 2017: $8 million (ADA Consideration)

Average 3 miles plus per $1 million
Results: 64 Miles of Improved Pavement Under HIPP

<table>
<thead>
<tr>
<th></th>
<th>Good (PQI &gt;7)</th>
<th>Fair (4.5, &lt;7)</th>
<th>Poor (&lt;4.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>592</td>
<td>506</td>
<td>176</td>
</tr>
<tr>
<td>2014</td>
<td>595</td>
<td>503</td>
<td></td>
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<tr>
<td>2015</td>
<td>617</td>
<td>481</td>
<td></td>
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<tr>
<td>2016</td>
<td>645</td>
<td>453</td>
<td></td>
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</tbody>
</table>
Results: Improved Replacement Cycle

- 2004: 108
- 2008: 74
- 2014: 62
Brady Street
Roosevelt Drive
Farwell Avenue
Prospect Avenue
Lisbon Avenue
4th Street
Jefferson Street
Added Safety Features
QUESTIONS!