Managing the Movable Bridges of New York City
AASHTO T-8 Technical Panel
May 24th, 2010
Movable Bridges of New York City
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MaCombs Dam Bridge
Ninth Street Bridge
Carroll Street Bridge
History of PM Program

East River Bridges
- Original Construction
- Rehabilitation
- Preventative Maintenance Task Force
- First Contract issued 1998
East River Bridges
Debris Accumulation

Paint Failure
NYCDOT Preventative Maintenance Task Force

Purpose
- Assist in development of in-house and contract maintenance program
- Review current program
- Developing/ modifying future program
NYCDOT Preventative Maintenance Task Force

**Members**
- New York City DOT
- New York State DOT
- FHWA
NYCDOT Preventative Maintenance Task Force

- Quarterly Meetings
- Design Reviews
- Project Inspections
Preventative Maintenance Plan

- Annual Bridge Washing
  - Vegetation/Debris Removal
- Spot Painting
- Mechanical Lubrication
- Wearing Surface
# NYCDOT Movable Bridge Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost (M)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willis Avenue</td>
<td>$620</td>
<td>Under construction</td>
</tr>
<tr>
<td>3rd Avenue</td>
<td>$150</td>
<td>Completed in 2007</td>
</tr>
<tr>
<td>145th Street</td>
<td>$80</td>
<td>Completed in 2006</td>
</tr>
<tr>
<td>MaCombs Dam</td>
<td>$180</td>
<td>Completed in 2005</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$1.03 Billion</strong></td>
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</tbody>
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History of PM Funding

ISTEA (1991):
• Allows Federal funds (STP, NHS, not HBP) for PM activities
• Demonstrate cost effectiveness
• Address safety deficiencies
• Eligibility expanded to all Federal-Aid Highways

TEA-21 (1998):
• Barriers removed
• Greater flexibility to address safety
• More funding
History of PM Funding

FHWA HQ Memo (2002):

• Federal Bridge funds for PM activities
History of PM Funding

SAFETEA-LU (2005):

• Continues Federal funds for PM activities
• Systematic Process (HBP)
Movable Bridge PM

In-House Maintenance

- Crews
  - 2 crews of Electricians
  - 2 crews of Oilers

- $3.2 M
Movable Bridge PM

Contract Maintenance

• 3 year contracts

• City Project Manager and Inspection Staff
Movable Bridge PM

Contract Maintenance

• Paving
• MPT
• Drainage System Cleaning
• Bridge/ Machinery Washing
Movable Bridge PM

Contract PM Costs - $9.8 M
Lessons Learned

• Approach Work
• Spot Painting
• Micro-surface overlays
• Cast Iron Grates