The Looming Aggregate Supply Crisis – Causes and Solutions

- Zoning and Land Use – Brian Barger, Attorney, Eastman and Smith

- Resource Demand and Availability – Mickey Cronin, Aggregate Section Head/Program Manager, ODOT Central Laboratory

- Technical and Specification Solutions – Larry Shively, Vice President Quality Control The Shelly Company

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Ohio Aggregates & Industrial Minerals Association
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OAIMA – Ohio Aggregates & Industrial Minerals Association – Our Mission

• Represent the Ohio industrial minerals industry
• Promote members’ interests in public and private sector
• Promote responsible regulatory compliance
• Provide timely education, training and communications
• Meet the evolving needs of members
OAIMA Members

• 98 Active Members
  – Producing sand, gravel, limestone and industrial minerals

• Nearly 100 Associate Members
  – Providing goods, services, consultation and equipment to the association and it’s member companies
Resource Demand

• Trends Mirror Economic and Social Issues and Needs
• Excellent Economic Indicator
• For Example:
  – Limestone Production (tons)
  – Trends in last Century
<table>
<thead>
<tr>
<th>Year</th>
<th>Limestone Production in Millions of Tons</th>
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</thead>
<tbody>
<tr>
<td>1939</td>
<td>12.8</td>
</tr>
<tr>
<td>1940</td>
<td>14.7</td>
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<tr>
<td>1941</td>
<td>18.5</td>
</tr>
<tr>
<td>1942</td>
<td>15.8</td>
</tr>
<tr>
<td>1943</td>
<td>16.2</td>
</tr>
<tr>
<td>1944</td>
<td>13.2</td>
</tr>
<tr>
<td>1945</td>
<td>15.0</td>
</tr>
<tr>
<td>1946</td>
<td>20.6</td>
</tr>
<tr>
<td>1947</td>
<td>24.1</td>
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<tr>
<td>1955</td>
<td>37.4</td>
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<tr>
<td>1957</td>
<td>39.1</td>
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<tr>
<td>2008</td>
<td>57.4</td>
</tr>
<tr>
<td>2011</td>
<td>53.6 (7%)</td>
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20th-21st Century Trends

FIGURE 7.—Sales and value of lime and dolomite in Ohio.

FIGURE 9.—Sales and value of sand and gravel in Ohio. Sales and values from 1984 to 2008 include Lake Erie dredged material.
Economic Recovery and Vitality:

• Directly related to locally available resources
• Prudent use of public and private funds mandate local resource availability
• Land Use Planning is Critical to long-term viability
• Funding! Money for projects or for Transportation? We have a Choice!
Aggregate Resource Availability

• Challenges

&

• Solutions
NIMBY

Not In My Back Yard
LULU
Locally Unwanted Land Use
CAVE
Citizens Against Virtually Everything
NOPE

Not On Planet Earth
Aggregates Industry Lessons Learned

• New York State Study*
  – Looked at Project Cost Impacts associated with transportation of aggregates only.

• Hypothetically Removed
  – 25% of aggregate resources
    • 42% Increase in Construction Costs
  – 50% of aggregate resources
    • 59% Increase in Construction Costs!

*Source Center for Government Research, The Economic Impact of the New York State Mining and Construction Materials Industry, June 2009