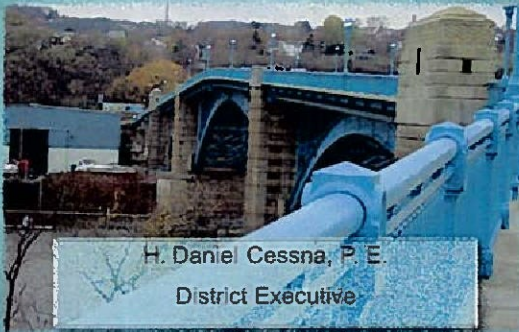
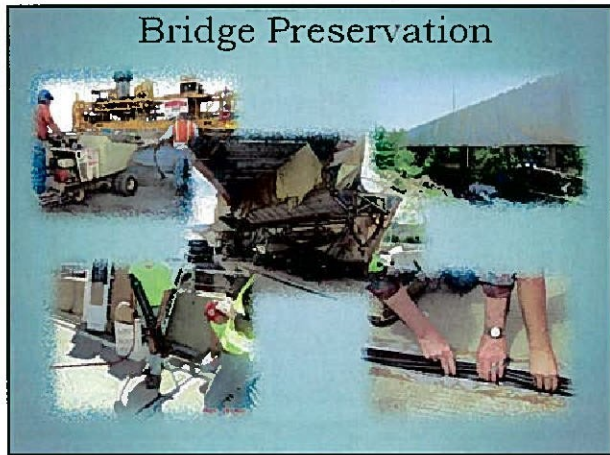
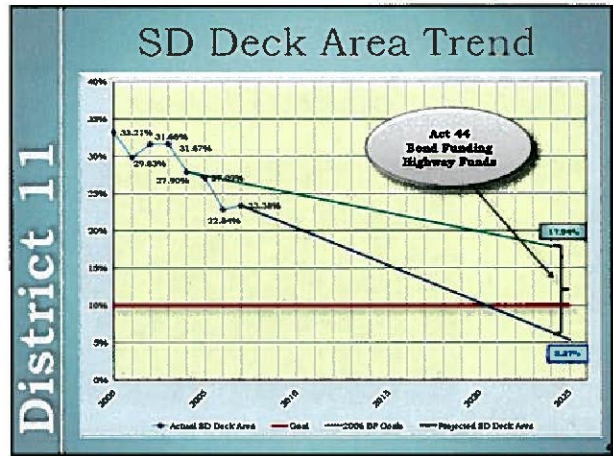
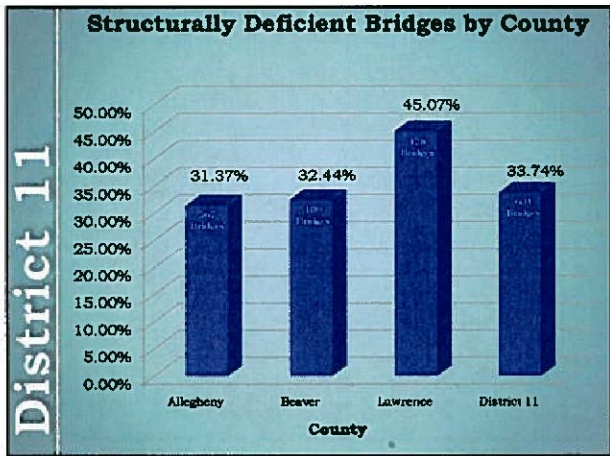
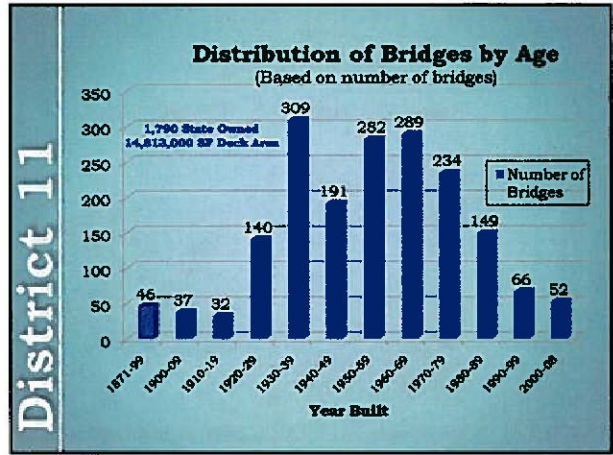


# House Transportation Committee Hearing



H. Daniel Cessna, P. E.  
District Executive



### District 11 Keeping "Good" Bridges Good

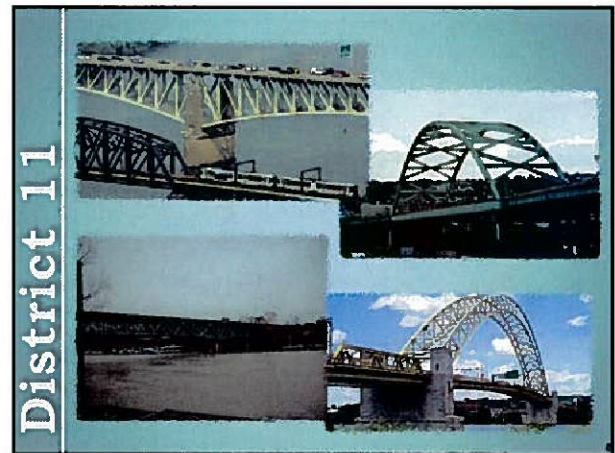
<p>Currently expending \$ 23 M annually in bridge preservation</p> <ul style="list-style-type: none"> <li>10.5% State</li> <li>12.5% Local</li> <li>10.0% Federal</li> </ul>	<p>Interstate bridge preservation projects 2007/2008</p> <ul style="list-style-type: none"> <li>2007/08 - \$1.4M</li> <li>2008/09 - \$1.1M</li> <li>2009/10 - \$1.1M</li> <li>2010/11 - \$1.1M</li> <li>2011/12 - \$1.1M</li> <li>2012/13 - \$1.1M</li> <li>2013/14 - \$1.1M</li> <li>2014/15 - \$1.1M</li> <li>2015/16 - \$1.1M</li> <li>2016/17 - \$1.1M</li> <li>2017/18 - \$1.1M</li> <li>2018/19 - \$1.1M</li> <li>2019/20 - \$1.1M</li> <li>2020/21 - \$1.1M</li> <li>2021/22 - \$1.1M</li> <li>2022/23 - \$1.1M</li> <li>2023/24 - \$1.1M</li> <li>2024/25 - \$1.1M</li> <li>2025/26 - \$1.1M</li> <li>2026/27 - \$1.1M</li> <li>2027/28 - \$1.1M</li> <li>2028/29 - \$1.1M</li> <li>2029/30 - \$1.1M</li> </ul>	<p>2009/2010 preservation projects include</p> <ul style="list-style-type: none"> <li>2009/10 - \$1.1M</li> <li>2010/11 - \$1.1M</li> <li>2011/12 - \$1.1M</li> <li>2012/13 - \$1.1M</li> <li>2013/14 - \$1.1M</li> <li>2014/15 - \$1.1M</li> <li>2015/16 - \$1.1M</li> <li>2016/17 - \$1.1M</li> <li>2017/18 - \$1.1M</li> <li>2018/19 - \$1.1M</li> <li>2019/20 - \$1.1M</li> <li>2020/21 - \$1.1M</li> <li>2021/22 - \$1.1M</li> <li>2022/23 - \$1.1M</li> <li>2023/24 - \$1.1M</li> <li>2024/25 - \$1.1M</li> <li>2025/26 - \$1.1M</li> <li>2026/27 - \$1.1M</li> <li>2027/28 - \$1.1M</li> <li>2028/29 - \$1.1M</li> <li>2029/30 - \$1.1M</li> </ul>	<p>Art 41 preservation methods include</p> <ul style="list-style-type: none"> <li>2009/10 - \$1.1M</li> <li>2010/11 - \$1.1M</li> <li>2011/12 - \$1.1M</li> <li>2012/13 - \$1.1M</li> <li>2013/14 - \$1.1M</li> <li>2014/15 - \$1.1M</li> <li>2015/16 - \$1.1M</li> <li>2016/17 - \$1.1M</li> <li>2017/18 - \$1.1M</li> <li>2018/19 - \$1.1M</li> <li>2019/20 - \$1.1M</li> <li>2020/21 - \$1.1M</li> <li>2021/22 - \$1.1M</li> <li>2022/23 - \$1.1M</li> <li>2023/24 - \$1.1M</li> <li>2024/25 - \$1.1M</li> <li>2025/26 - \$1.1M</li> <li>2026/27 - \$1.1M</li> <li>2027/28 - \$1.1M</li> <li>2028/29 - \$1.1M</li> <li>2029/30 - \$1.1M</li> </ul>	<p>Future Bridge Preservation goals are \$14M</p> <ul style="list-style-type: none"> <li>2009/10 - \$1.1M</li> <li>2010/11 - \$1.1M</li> <li>2011/12 - \$1.1M</li> <li>2012/13 - \$1.1M</li> <li>2013/14 - \$1.1M</li> <li>2014/15 - \$1.1M</li> <li>2015/16 - \$1.1M</li> <li>2016/17 - \$1.1M</li> <li>2017/18 - \$1.1M</li> <li>2018/19 - \$1.1M</li> <li>2019/20 - \$1.1M</li> <li>2020/21 - \$1.1M</li> <li>2021/22 - \$1.1M</li> <li>2022/23 - \$1.1M</li> <li>2023/24 - \$1.1M</li> <li>2024/25 - \$1.1M</li> <li>2025/26 - \$1.1M</li> <li>2026/27 - \$1.1M</li> <li>2027/28 - \$1.1M</li> <li>2028/29 - \$1.1M</li> <li>2029/30 - \$1.1M</li> </ul>
--	---	---	---	--

**District 11**

## "Big Bridge" Program

Projects under construction 2009/2012

Rehabilitation	Preservation
Tri-Horo Bridges - 3 phases - \$49.5M	
Boston Bridge - \$23M	McKees Rocks Bridge - \$4M
Erica Phase 4 - \$25M	Westinghouse Bridge - \$2.5M
Shippingport Bridge \$16M	
Marshall Avenue Interchange - \$51M	



**District 11**

## "Big Bridge" Program (Cont.)

### Candidate Projects

SR 51 over the Beaver River - paint / preservation project - \$25 M
Pl. Duquesne Bridge - Latex overlay - \$21 M
Vanport Bridge - paint / preservation - \$10 M
Birmingham Bridge - paint / preservation project - \$25 M
West End Bridge - paint / preservation project - \$25 M

**District 11**

## Challenges

21,997 (604 Bridges) are structurally deficient (13% on the two smallest networks)	339 Structural Maintenance Priorities
39 posted bridges	Need to let 30 SD bridges annually while keeping "Good Bridges" good with existing staff
Retain existing staff and hire qualified new staff in the future 33 Staff members in-house 18 - Design 16 - Inspection	Keeping up with inspection efforts (I&W like structures / gressed plates, 6-100 man hours), inspection of light poles, 10 year project, T-beam bridges, thru trusses, rocker bearings, etc.

**District 11**

## Plan of Attack

Efficiently address challenges through a multi-part strategy • SD numbers per network • Big Bridge program	Keeping "Good" bridges good
Eliminate our 339 structural maintenance priorities	Project Delivery Strategies

**District 11**

## Eliminate Maintenance Priorities

### Strategies

100% maintenance funded on-demand contract to address maintenance priorities
Utilize Guide Rail, Bridge Maintenance, Bridge Washing contracts
Department Bridge Process concentrating on bridge repairs
Act 43 Small Bridge Replacement/Retain Group Contract
Program Capital Projects on TB to eliminate maintenance priorities
High level review of inspection findings to rate appropriately to avoid catastrophic failures

## Efficiently Address Challenges

Utilizing available funding to let 30 SD bridges / year  
(ACT 33, local money, deferred TIP money)  
• Check for Deck replacement structures to place on projects  
• Group projects to avoid repetitive work / Redundancy

Focus on High Risk Bridges and Culverts  
• Culvert group projects

Improve SD Statistics  
• Review all reports for consistency in bridge projects to state & culvert and IA Network

Streamlining the design process  
• Coordinate with other County Agencies  
• Pre-Plans  
• Limited Review

Outstanding Concern: The draft TIP anticipates bond funding not currently realized

## Reducing SD Bridges

Through Innovative, Cost Saving, FAST, In-house designs (100% State Funding)



Economical Cast-in-Place Concrete Slab Bridges Utilizing Existing Sub-structures



Galvanized Multi-Beam Bridges for Longer Spans

Replace-in-kind, Corrugated Metal Pipe Culverts