ASSET MANAGEMENT

BRIDGE MANAGEMENT SYSTEM
PERSPECTIVE
What did we have?

• Data rich environment due to the bridge inspection data since the 1970’s

• Since we had been collecting data for 30+ years we can generate deterioration trends and bridge reconstruction needs
Bridge Project Programming

- Based strictly on Sufficiency Rating – “worst/first”
- Identified High Cost Bridges
- Did not worry about Bridge Maintenance – (that’s what Maintenance does)
ASSET MANAGEMENT – BRIDGE MANAGEMENT
SYSTEM PERSPECTIVE

Reality Check

• More bridge needs than funds available
• “High Cost Bridges” had become exorbitantly high cost bridges
• Maintenance resources (both financial & human) had been drastically reduced

We cannot continue doing business the same way!!!
What to do??

- Change our priority from worst/first philosophy
- Look at what impacts motorists most (decks)
- Cannot let bridges age w/o maintenance
We went back to the bridge data and asked some different questions:

- **For Priority** – Condition, Size, ADT, Deck Rating
- **For Decks** – Just bridges w/ bad deck ratings
We went back to the bridge data and asked some different questions:

- For Maintenance
  1. High Cost & Movable Bridges – Initiate bridge preservation projects
  2. Bridges over Interstates – Preventive maintenance program
ASSET MANAGEMENT – BRIDGE MANAGEMENT SYSTEM PERSPECTIVE

After the “black box” provides bridges, or lists of bridges, the projects get evaluated by:

- Manager of Bridge Inspection
- Manager of Bridge Design
- Executive Manager of Structural Engineering
- Chief Engineer (State Transportation Engineer)
- Others (Construction, Project Mgmt, Maint. & Ops., DPPD)
- Projects get initiated in each of the Pipelines

*****Subject Matter Experts Input*****
ASSET MANAGEMENT – BRIDGE MANAGEMENT
SYSTEM PERSPECTIVE

The Capital Investment Strategy process was invaluable in moving from a simple Bridge programming process to an Asset/Bridge Management System:

- Recognized Needs >>>Resources
- Allowed New Programs Deck Replacement & Interstate Preventive Maintenance to be initiated
Highway Infrastructure Asset Management Structures

• Continued refinement of the Bridge Management System
• Apply the same methodology to other structural assets which we have data for – culverts, sign structures & high mast lighting
• Begin collecting data on noise walls & retaining walls
Highway Infrastructure Asset Management

Structures

Assets
• Major Viaducts
• Movable Bridges
• Major Bridges
• Minor Bridges
• Dams
• Sign Structures
• Noise Walls
• Retaining Walls
• High Mast Lighting

Asset Data
• NBIS 2 year Cycle
• NBIS 2 year Cycle
• NBIS 2 year Cycle
• 4 year Cycle
• NBIS & DEP 2 year Cycle
• 4 year Cycle
• Not Inventoried
• Not Inventoried
• 4 year Cycle