**Completed Projects**

1. **Police Control Room Renovation—Efficient and Sustainable:**
   The existing monitoring equipment and console, initially installed in 1998, is obsolete. The purpose of the upgrade is to replace the present outdated linear console and overhead monitors with a more ergonomic console, provide a better monitor capability that increases the functionality of numerous security cameras, upgrade outdated electronics equipment associated with the console, and undertake associated minor room renovations. Increased efficiencies serve the one dispatcher who works the console in the layout. This project has an estimated DRBA cost of $300,000 for design and construction in 2014.

2. **Magazine Ditch Floodgate Replacement—Asset Preservation:**
   This is a project which is intended to address deficiencies in the floodgate system which regulates tidal flow in "Magazine Ditch." This conveyance is located beneath the Delaware Memorial Bridge in Delaware. This project has an estimated DRBA cost of $250,000 for construction in 2014.

3. **Traffic Management System—Efficient and Sustainable:**
   The existing eight (8) variable message signals (VMS) are obsolete, parts are no longer available for hardware replacement, software is no longer supported because the vendor is no longer in business, and the existing support structures require replacement due to new load rating analysis specifications. This project includes replacement of the existing eight (8) VMS with six (6) new VMS, including system software, hardware and structural supports. Work includes owner furnishing signage hardware in accordance with New Jersey Turnpike contract pricing and accomplishing construction under separate contract. This project will have an estimated DRBA cost of $5,000 for preconstruction in 2014, plus an estimated DRBA cost of $530,000 for software in 2014, and an estimated DRBA cost of $2.44 million for construction in 2014.
Continuing Projects

4. **Deck Resurfacing – Asset Preservation:**
The 1<sup>st</sup> and 2<sup>nd</sup> Structures typically exhibit minor deck cracking and spall areas due to age and heavy truck volumes. Annual repairs are required to preserve these assets. This project includes repairing the bridge deck by patching, overlay, or joint replacement as needed to maintain an appropriate level of service. This project has an estimated DRBA cost of $400,000 in 2014 plus an estimated cost of $1.6 million in the out years.

5A. **Phase IV, I-295 Southbound – Norfolk Southern Bridge to I-95 – Safety:**
This is the final phase of safety improvements along I-295 in New Jersey and Delaware which began in 1999. The southbound I-295/US13 interchange experiences traffic congestion where four through lanes decrease to two lanes and the condition is further complicated by unsafe weaving patterns. This project includes removal of five (5) existing bridges, replacement of one (1) existing bridge, and elimination of the weaving patterns for increased traffic capacity and safety. The project has an estimated DRBA cost of $8,000 for preconstruction in 2014, plus an estimated DRBA cost of $12,000 for preconstruction in the out years. This project has an estimated DRBA cost of $4.66 million for construction in 2014, and an estimated DRBA cost of $21.64 million in the out years.

6. **Security Improvements - Security:**
This project includes enhancements to the existing security systems in accordance with the final Homeland Security Assessment Report. This project has an estimated DRBA cost of $485,000 in 2014 for replacement of eight (8) tower cameras and the provision for new anchorage cameras, plus an estimated cost of $1.2 million in the out years for biometric security upgrades and automated traffic detection.

7. **Miscellaneous Steelwork Repairs – Asset Preservation**
This project programs miscellaneous steelwork repairs found to be necessary as a result of comprehensive annual inspections conducted by our consultants. These repairs are necessary to preserve these assets and to avoid having unplanned major work performed on the steel structure while maintaining safety and operational needs. Work activities typically include replacement of worn bearing assemblies, access platforms, maintenance of steel connections, welding, installing safety features, and other work. This project has an estimated DRBA cost of $1.7 million in 2014 plus an estimated cost of $6 million in the out years.
Continuing Projects

8. **Minor Capital Equipment – Asset Preservation:**
This project programs annual capital equipment purchases which may include but are not limited to: vehicles, trucks, specialty equipment, emergency generators, trailers, and other equipment that are utilized to preserve the existing infrastructure assets. Purchases are based on established replacement guidelines considering useful life and condition. This project has an estimated DRBA cost of $1.6 million in 2014 plus an estimated cost of $5 million in the out years.

9. **Minor Capital Maintenance – Asset Preservation:**
This project programs annual work activities necessary to accommodate changing regulations and to preserve existing infrastructure. Minor capital maintenance may include but is not limited to: interior renovations, building upgrades, electrical/lighting improvements, installation of oil/water separators, fencing, guiderail replacement, signage replacement, HVAC upgrades, chiller upgrades, emergency generator improvements, miscellaneous office space improvements, miscellaneous toll booth improvements, as well as utility and general infrastructure improvements. This project has an estimated DRBA cost of $1 million in 2014 plus an estimated DRBA cost of $1.81 million in the out years.

10. **Automation/Telecommunications Upgrades – Efficient and Sustainable:**
Automation upgrades and equipment enhancements are needed to maintain sustainable and efficient facilities. This yearly project includes but is not limited to: automation master planning, computer hardware replacement purchases, local and wide area network upgrades, software and hardware upgrades, file back-up system maintenance and upgrades, video teleconference system upgrades, document management storage systems, server replacements, business continuity hardware/software, network replacement/upgrades, storage area network upgrades, and various hardware/software installations or upgrades as necessary. This project has an estimated DRBA cost of $2.505 million in 2014 plus an estimated DRBA cost of $1.925 million in the out years.
New Projects

11. **Electronic Toll Collection Equipment Upgrades – Efficient and Sustainable:**
The existing electronic toll collection (ETC) system is over ten years old and by industry standards is nearing the end of its useful life. This project includes replacement of system hardware and software with a new advanced ETC system that will safeguard against having unplanned interruptions and provide for more reliable toll collection. This project has an estimated DRBA cost of $5 million for construction in 2014, plus an estimated DRBA cost of $2.5 million for construction in the out years.

12. **1st Structure Improvement Program – Asset Preservation:**
The 1st Structure was opened to traffic in 1951. Because of the age of this structure and heavy truck volume, this contract was undertaken to conduct an engineering assessment of the various components of the structure (roadway deck, coatings system, main cables, suspender ropes, and steel members) to determine the required work necessary to preserve this asset into the future.

This project, 1st Structure Safety Walk and Drainage Retrofits, includes modifying the existing open grate side walk to a solid surface and also includes modifications to the existing curb openings for drainage on the deck surface. This project has an estimated DRBA cost of $400,000 for preconstruction in 2014 and an estimated DRBA cost of $4 million for construction in the out years.

5B. **Phase IV, I-295 Southbound – Norfolk Southern Bridge to I-95 – Safety:**
This is the final phase of safety improvements along I-295 in New Jersey and Delaware which began in 1999. The southbound I-295/US13 interchange experiences traffic congestion where four through lanes decrease to two lanes and the condition is further complicated by unsafe weaving patterns. This project includes removal of five (5) existing bridges, replacement of one (1) existing bridge, and elimination of the weaving patterns for increased traffic capacity and safety. The project has an estimated DRBA cost of $8,000 for preconstruction in 2014, plus an estimated DRBA cost of $12,000 for preconstruction in the out years. This project has an estimated DRBA cost of $4.66 million for construction in 2014, and an estimated DRBA cost of $21.64 million in the out years.
New Projects

13. **Steelwork Painting Program, 1st and 2nd Structure – Asset Preservation:**
As a result of the painting program previously developed, a number of construction projects have been planned.
The work planned to be completed under this contract includes complete existing paint removal and over coating of the first and second structure tower exteriors. This project has an estimated DRBA cost of $7 million for construction in 2014, and an estimated DRBA cost of $7 million for construction in the out years.

The next project includes spot painting and full overcoat of the first structure west truss spans. This project has an estimated cost of $2.8 million for construction in the out years.

The project to follow this includes a spot painting and full overcoat of the second structure east girder spans. This project has an estimated cost of $3 million for construction in the out years.

14. **Cable Preservation – Asset Preservation:**
As a result of the recent cable investigation it was determined that preventative measures are necessary to maintain the service life and capacity of the Delaware Memorial Bridge structures. This project will develop preliminary design details to support a public RFP for full design and construction of the accepted system. This project has an estimated DRBA cost of $700,000 for preconstruction in 2014, and an estimated DRBA cost of $40 million for construction in the out years.

15. **Suspension Pin and Link Rehabilitation – Asset Preservation:**
As a result of recent annual inspections, the suspension pin and links have been identified as needing rehabilitation. This system is the primary connection point between the structure of the bridge deck and the towers. This project has an estimated DRBA cost of $1 million for preconstruction in 2014, plus an estimated DRBA cost of $9 million for construction in the out years.

16. **Toll Plaza Improvements – Efficient and Sustainable:**
The existing toll plaza consists of thirteen (13) traditional toll lanes including raised islands and collection booths. Although existing infrastructure provides the capacity needed to accommodate today’s traffic volumes, investigation of alternative toll configurations to accommodate future traffic characteristics is recommended. This project includes analysis of projected traffic volumes and alternative toll lane configurations. The project will have an estimated DRBA cost of $300,000 for preconstruction in the out years.
**New Projects**

17. **Ship Collision Protection – Safety:**
This is a new project to develop and implement a ship collision protection system for the Delaware Memorial Bridge. This project will include risk assessment, investigation of modern ship collision protection systems, environmental impacts, design details and construction methods. This project has an estimated preconstruction cost of $500,000 in 2014, and $2.5 million for preconstruction in the out years. This project as an estimated construction cost of $15 million in the out years.

18. **Eight Bay Garage – Efficient and Sustainable:**
This project includes the modification of a previously designed maintenance garage and its construction. This garage will serve to lengthen equipment service life and increase operating efficiencies in the maintenance complex. This project has an estimated DRBA cost of $100,000 for preconstruction in the outyears, plus an estimated DRBA cost of $900,000 for construction in the out years.