

**Southwestern Pennsylvania Commission
District 10-0 Program Modifications**

Discussion:

- Engineering District 10 is requesting 86 program adjustments to the 2011-2014 Program.
- Fiscal modifications are being made to the FFY 2011-2014 TIP to keep the fiscal year-to-year funding in balance.
- Funding for the program modifications will be provided from the sources as noted in the narrative below and on the attached Fiscal Constraint Chart.

Project Summaries:**Amendments**

- **PA 228 Mars West PM:** This highway restoration project involves milling of the existing bituminous surface, patching, overlay with new bituminous courses, and guide rail upgrades along PA 228 from approximately 0.16 mile west of the intersection of SR 3017 (Crider Road) and extends east to the intersection of PA 228 and SR 3019 (Warrendale Road) in Adams Township, Butler County.

District maintenance forces have seen rapid deterioration and increasing maintenance through this area. A recent visual review of the project reveals distress in areas of previous widening and areas of base failure, as well as transverse and longitudinal cracking, which has been extensively sealed. By applying this preventive maintenance project in a timely manner, the District hopes to prevent further deterioration and more extensive future repairs. The significant Average Daily Traffic (ADT) on this route complicates the performance of maintenance activities. The heavy traffic can also result in rapid, unexpected changes in the pavement conditions.

Therefore, the District now requests that this project and its construction phase be added to the TIP in FFY 2011 in the amount of \$1,200,000 (100% Federal utilizing toll credits).

The sources of funds to cover the addition of this phase are as follows:

- **Stonebreaker Hill West 3R:** \$300,000 Federal from the deobligation of surplus construction funds on April 13, 2011.
- **Kaylor Railroad Overpass:** \$27,640 Federal from the deobligation of surplus preliminary engineering funds on April 13, 2011.
- **Kaylor Railroad Overpass:** \$60,000 Federal from the deobligation of surplus final design funds on April 13, 2011.
- **SR 268 Lemmon Road Intersection:** \$1,876 Federal from the deobligation of surplus construction funds on April 14, 2011.
- **Distant North Climbing Lane:** \$74,500 Federal from the deobligation of surplus construction funds on April 14, 2011.
- **Stonebreaker Hill West 3R:** \$15,000 Federal from the deobligation of surplus right-of-way funds on April 18, 2011.
- **Stonebreaker Hill West 3R:** \$34,000 Federal from the deobligation of surplus utility funds on April 18, 2011.
- **Oakland Avenue SAMI II:** \$13,000 Federal from the deobligation of surplus construction funds April 22, 2011.
- **Buffalo Elementary School Intersection:** \$59,370 Federal from the deobligation of surplus right-of-way funds on April 27, 2011.
- **US 22 Variable Message Signs:** \$285,230 Federal from the deobligation of surplus preliminary engineering funds on April 27, 2011.

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- **Freeport Bridge Options:** \$329,384 Federal from the deobligation of surplus study funds on May 9, 2011.
- **PA 68 Evans City West PM:** This highway restoration project involves milling of the existing bituminous surface, drainage upgrades, installing two crosswalks and four detectable warning surfaces (DWS) in three quadrants of the signal with PA 528, along with 150 feet of milling and paving on PA 528, joint repair, line striping, and guide rail updates along PA 68 from approximately 0.30 mile west of the intersection of PA 68 and Township Road #325 (Textor School Road) in Jackson Township, Butler County, and continues east to a point in Evans City Borough that is 0.28 mile east of the intersection of PA 68 and PA 528.

County maintenance forces have noted an increasing amount of work to maintain this section of the route. Roadway performance measures, along with visual review of the conditions in the field, indicate the bituminous surface is in need of replacement. By applying this preventive maintenance project in a timely manner, the District hopes to prevent further deterioration and more extensive future repairs, as well as return the road to a condition where only routine maintenance is needed to preserve the pavement condition.

Therefore, the District now requests that this project and its construction phase be added to the TIP in FFY 2011 in the amount of \$1,100,000 (100% Federal utilizing toll credits).

The sources of funds to cover the addition of this phase are as follows:

- **Grove Chapel Climbing Lane:** \$6,000 Federal from the deobligation of surplus utility funds on October 7, 2010.
- **Route 286 West Congestion:** \$41,000 Federal from the deobligation of surplus preliminary engineering funds on October 8, 2010.
- **Route 228 Improvement Project:** \$8,320 Federal from the deobligation of surplus preliminary engineering funds on October 28, 2010.
- **Hillsdale North 3R:** \$42,500 Federal from the deobligation of surplus utility funds on January 19, 2011.
- **Route 356 Interchange:** \$56,247 Federal from the deobligation of surplus preliminary engineering funds on March 1, 2011.
- **Route 711 Improvement:** \$40,000 Federal from the deobligation of surplus preliminary engineering funds on March 28, 2011.
- **Freeport Bridge Options:** \$6,616 Federal from the deobligation of surplus study funds on May 9, 2011.
- **Shelocta West 3R:** \$6,335 Federal from the final voucher of surplus construction funds on April 29, 2011.
- **Blairsville Interchange Companion:** \$14,000 Federal from the deobligation of surplus construction funds on May 20, 2011.
- **Philadelphia Street Congestion:** \$47,000 Federal from the deobligation of surplus construction funds on May 20, 2011.
- **SR 66 Expressway PM:** \$31,982 Federal from the deobligation of surplus construction funds on May 23, 2011.
- **Blairsville West 3R:** \$664,800 Federal from a low bid savings.
- **Worthington East PM:** \$155,200 Federal from a low bid savings.

The State match from the **Blairsville West 3R** and **Worthington East PM** projects made available from low bid savings will be placed into the **SPC District 10 Highway/Bridge Line Item** to be used at a later date.

- **US 119 over US 422 Bridges:** This project is the replacement of the existing superstructures of the bridges carrying US 119 northbound and southbound over US 422 eastbound and westbound at the US 119/US 422 Interchange located south of Indiana Borough in White Township, Indiana County.

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Throughout the years there have been various collisions of over-height vehicles hitting the structures carrying US 119 northbound and southbound over US 422 eastbound and westbound. These collisions have caused significant damage to the beams, with some beams being gouged and/or deformed. This impact damage is the reason both bridges are classified as structurally deficient (SD).

In the summer of 2010 the District let an emergency contract to remove a portion of a damaged fascia beam on the southbound structure. Following impact by an over-height vehicle, the beam developed a 37-inch crack. The emergency contract removed the beam and the deck over the beam and established a shoulder restriction to keep traffic away from the missing deck and beam area.

The proposed scope of work for this project includes raising the structures to achieve the required vertical clearance as per current design criteria, replacing the previously removed beam and other damaged beams, removing and replacing the concrete decks and barriers, placing new expansion dams, replacing the rocker bearings, and performing substructure repairs. In addition, minimal approach roadway work will be needed to account for the raise in grade. The proposed work will remove the SD designation from both structures.

Therefore, the District would now like to add this project and its construction phase in FFY 2012 in the amount of \$7,622,000 (100% Federal utilizing toll credits).

The sources of funds to cover the addition of this phase are as follows:

- **SPC District 10 Highway/Bridge Line Item:** \$5,400,000 Federal Bridge.
- **Freeport Bridge Ramps:** \$2,222,000 Federal Highway from a low bid savings and from the early conversion in FFY 2010 of advance constructed FFYs 2011 and 2012 funds.
- **Cunningham Street Bridge:** This project involves replacement of the existing SD bridge carrying PA 68 (Cunningham Street) over Sullivan Run in the City of Butler, Butler County. The project is currently in the very early stages of preliminary design.

It was originally intended that preliminary engineering would be done by Department in-house bridge design personnel. However, the District is now changing to a consultant design because of our internal workload and the complexity of the project. This project is part of a Department of Environmental Protection (DEP) flood control project in the City of Butler. Substantial coordination with DEP will be required during the design of the project. In addition, since the project is located in the City of Butler, traffic control and utility relocation work will be very extensive and will require much coordination with the City and the utility companies. Our internal bridge design staff does not have sufficient time to devote to this project because of the workload from other bridge projects currently under design. Our proposed design consultant has more experience dealing with this type of situation based on other projects they are currently designing for the District.

To cover the costs of a consultant design, an additional \$219,000 is needed in preliminary engineering. We, therefore, request that the preliminary engineering phase of this project be added to the TIP in FFY 2011 and that \$219,000 (80% Federal and 20% State) be programmed in that phase.

The additional preliminary engineering funds will be obtained from the following sources:

- **Cherry Valley Bridge #4:** \$15,500 State from available right-of-way and utility funds. Construction of this Department Force Bridge project has been deferred until 2014. Therefore, the FFY 2011 right-of-way and utility funds are not needed and will be reprogrammed at a later date.
- **SPC District 10 Highway/Bridge Line Item:** \$175,200 Federal and \$28,300 State.

Administrative Actions

- **Kiddyland Park Bridge:** This SD bridge carries PA 28 over Cowanshannock Creek in Rayburn Township, Armstrong County.

During development of the 2011-2014 TIP it was the District's intent to program construction for this project in the first year of the TIP. However, lack of bridge funds and the higher priority of other projects utilizing those funds forced us to program construction in FFY 2012. The preliminary engineering, final design, and right-of-way phases of this project were programmed on the previous 2009-2012 TIP, while the utility phase is programmed on the current 2011-2014 TIP.

Because of the current bridge conditions, the District has been working to prepare this project for a fall 2011 let. Most of the monies to fund construction in FFY 2011 are now available. Therefore, we now request that a substantial portion of the construction funding (\$3,689,690) be advanced from FFY 2012 to FFY 2011. The remaining monies (\$410,310) will stay in FFY 2012 to fully fund construction.

The funds to partially program construction in 2011 are available from the following sources:

- **SPC District 10 Highway/Bridge Line Item:** \$103,035 Federal.
 - **Garretts Run Bridge #2:** \$104,800 Federal and \$26,200 State from a low bid savings.
 - **T-535 McAuley Bridge:** \$36,329 Federal and \$6,900 State surplus final design funds.
 - **Huff Bridge:** \$88,800 Federal and \$22,200 State from a low bid savings.
 - **Dilltown Bridge #1:** \$895,200 Federal and \$223,800 State from a low bid savings.
 - **T-678 Dixon Run Bridge:** \$304,000 Federal and \$57,000 State from a low bid savings.
 - **Onberg Bridge:** \$9,400 Federal from the deobligation of surplus preliminary engineering funds on October 8, 2010.
 - **Nolf Corners Bridge:** \$90,000 Federal from the deobligation of surplus preliminary engineering funds and \$320,000 Federal from the deobligation of surplus final design funds on January 3, 2011.
 - **PA 28 Pine Creek Bridge:** \$118,000 Federal from the deobligation of surplus final design funds on January 24, 2011.
 - **Main Street Viaduct:** \$800,000 Federal from the deobligation of surplus construction funds on February 4, 2011.
 - **Yellow Creek Bridge:** \$2,805 Federal from the final voucher of surplus utility funds on March 9, 2011.
 - **Onberg Bridge:** \$1,000 Federal from the deobligation of surplus preliminary engineering funds on March 28, 2011.
 - **2008 Armstrong Bridge Preservation:** \$1,007 Federal from the final voucher of surplus construction funds on March 31, 2011.
 - **Garretts Run Bridge #1:** \$340,000 Federal from the deobligation of surplus construction funds on April 18, 2011.
 - **SR 268 Lemmon Road Intersection:** \$65,624 Federal from the deobligation of surplus construction funds on April 14, 2011.
 - **2011 Armstrong Bridge Preservation:** \$73,590 State surplus construction funds.
- **PA 228/I-79 Ramps:** This project includes the construction of a new northbound ramp from PA 228 to Interstate 79 northbound and a new southbound loop ramp from PA 228 to Interstate 79 southbound in Cranberry Township, Butler County. These ramps are part of the improvements that were identified as needs in the Route 228 Improvement project--a large scale project that was intended to expand the entire PA 228 corridor between Routes 19 and 8 in Butler County.

As the Route 228 Improvement project was developed, it became apparent that funding the construction of such a large project could not be realized at the funding levels that were historically available in the region's TIP.

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The District worked with the Bureau of Design and FHWA, as well as the project stakeholders, to approach the needs on the corridor through smaller scale improvements at specific locations. The preliminary studies that were developed served to guide the selection and prioritization of specific projects.

Two of the proposed projects to utilize existing programmed funds on the Route 228 project were the Route 228 Northbound Onramp and the Route 228 Southbound Loop Ramp. The intention was to stage the construction of these projects with the northbound ramp starting in FFY 2011 and the southbound ramp starting in FFY 2012. The decision to stagger the construction phases was largely due to the project development schedule. The northbound onramp was in a position to move more quickly and, at the time, could be available for the 2011 letting.

The District was approached by Cranberry Township when the right-of-way plan for the Northbound Onramp project was nearly complete. The Township, in conjunction with several developers, was working to develop a master plan for land use in the vicinity of the PA 228/I-79 Interchange. The Township asked that the Department postpone further development of the plan until it could prepare its land use plan. The proposals included in their land use plan could then be incorporated in the highway plan.

Delays occurred in the production of the land use plan which, subsequently, affected the Department's project development schedule. The resulting delays from incorporating the Township's plan culminated to the point where the original concept of phased construction was lost.

Therefore, the District now proposes to combine the construction phases of the Route 228 Northbound Onramp and the Route 228 Southbound Loop Ramp projects into the **PA 228/I-79 Ramps** project and add its construction phase to the TIP in the amount of \$13,225,200 (80% Federal and 20% State) in FFY 2012.

The construction phase of the Route 228 Northbound Onramp project is primarily funded in FFY 2011. Since construction of this project is being combined with that of the Route 228 Southbound Loop Ramp and funded in FFY 2012 as the PA 228/I-79 Ramps project, the 2011 construction monies from the Northbound Onramp will be disbursed and utilized as follows:

- **Route 228 Southbound Loop Ramp:** \$1,057,900--advance right-of-way funds from FFY 2012 to FFY 2011.
- **Route 228 Southbound Loop Ramp:** \$500,000--program utility funds in FFY 2011.
- **I-79/SR 3025 Seneca Missing Ramps:** \$535,328--advance construction funds from FFY 2012 to FFY 2011 to allow for additional advance construct conversion.
- **Freeport Bridge Ramps:** \$1,167,647--add construction funds in FFY 2011 to allow for additional advance construct conversion.
- **Slabtown Bridge #1:** \$200,000--advance utility funds from FFY 2012 to FFY 2011.
- **Slabtown Bridge #1:** \$200,744--advance right-of-way funds from FFY 2012 to FFY 2011.

Construction for the PA 228/I-79 Ramps project will be funded in FFY 2012 from the following sources:

- **Route 228 Southbound Loop Ramp:** \$1,033,405--right-of-way funds currently programmed in FFY 2012 being advanced to FFY 2011.
- **Route 228 Southbound Loop Ramp:** \$5,728,900--construction funds currently programmed in FFY 2012.
- **Route 228 Northbound Onramp:** \$767,381--construction funds currently programmed in FFY 2012.
- **Slabtown Bridge #1:** \$212,200--utility funds currently programmed in FFY 2012 being advanced to FFY 2011.
- **Slabtown Bridge #1:** \$212,200--right-of-way funds currently programmed in FFY 2012 being advanced to FFY 2011.

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- **I-79/SR 3025 Seneca Missing Ramps:** \$4,347,727--FFY 2012 construction funds from low bid savings and early advance construct conversion.
 - **PA 228 Earmark:** \$822,589.
 - **SPC District 10 Highway/Bridge Line Item:** \$100,798.
- **Trade of State Funds:** We are proposing a trade of State funds between SPC and the Northwest Rural Planning Organization (RPO) in FFY 2011.

The **Billings Station Phase 2** project in Clarion County of the Northwest RPO was recently let and at that time experienced a low bid cost increase. The project is now in need of \$30,145 in State Highway funds. That type of funds is not available within the Clarion County TIP. Therefore, we are now proposing that \$30,145 in surplus State Highway funds be removed from the **SPC District 10 Highway/Bridge Line Item** and placed into the construction phase of the **Billings Station Phase 2** project. In return \$30,145 in surplus State Bond funds will be removed from the **2013 Clarion Department Force Bridge Line Item** and placed into the **SPC District 10 Highway/Bridge Line Item** to be utilized at a later date.