#### BR 1-361 ON SR 72, SUNSET LAKE ROAD OVER MUDDY RUN, SOUTH OF NEWARK [Project No. 22-071-03]

**PROJECT SCOPE/DESCRIPTION:** Bridge 1-361 on SR 72, Sunset Lake Road is located south of Newark. Work on this bridge to extend the life of the structure includes replacement of the existing prestressed concrete beams in kind, repair of the existing concrete substructure, placement of scour countermeasures, upgrade of terminal ends of guardrail and minimal approach roadway work. Construction has been completed on this bridge and the road has been reopened to traffic.

**PROJECT JUSTIFICATION:** The bridge is in need of repair to extend the life of the structure and maintain its structural capacity and is currently ranked  $92^{nd}$  out of 1,399 on the department's bridge deficiency list (via the bridge management program).

County: Municipality: Funding Program: Functional Category: Representative District: Senatorial District:

Road System – Bridges Preservation 24, 27

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New Castle









Bridge 1-361

### BR 1-361 ON SR 72, SUNSET LAKE ROAD OVER MUDDY RUN, SOUTH OF NEWARK (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 12/31/04	Expended as of 12/31/04	Committed Unexpended as of 12/31/04	Authorization Available
BR 1-361 on SR 72, Sunset Lake Road over Muddy Run, South of Newark		\$ 464.1						
Prior Years	State			\$ 464.1	\$ 387.6	\$ 307.3	\$ 80.3	\$ 76.5
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 464.1	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 76.5
112000	Federal		<b> • • • • • • • • • </b>	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2006 Request	State							
11 2000 Reguest	Federal							
	Other							
FY 2007 Projected	State							
<u> </u>	Federal							
	Other							
FY 2008 Projected	State							
	Federal							
	Other							
EV 2000 2011 B 1 4 1	<u> </u>							
FY 2009-2011 Projected	State Federal							
	Other							
Total Projected	State			\$ 464.1	\$ 387.6			\$ 76.5
	Federal			\$ 0.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 464.1	\$ 464.1	\$ 464.1	\$ 387.6	\$ 307.3	\$ 80.3	\$ 76.5

### BR 1-361 ON SR 72, SUNSET LAKE ROAD OVER MUDDY RUN, SOUTH OF NEWARK (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
22-071-03	BR 1-361 on SR 72, Sunset Lake Road over Muddy Run, South of Newark	PE RW	100% ST 100% ST	\$ 60.0 0.0	\$ 60.0 0.0	\$ 0.0 0.0				
		С	100% ST	404.1	404.1	0.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 464.1	\$ 464.1	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

#### STATE OF DELAWARE

#### BR 1-394N AND BR 1-394S ON US 13 OVER DRAWYERS CREEK [Project No. 23-071-02]

**PROJECT SCOPE/DESCRIPTION:** The proposed work for Bridge 1-394N is currently being studied. At the least, it will consist of repairing the delaminations in the existing concrete deck underside and substructure, rejacketing and repairing the piles, and repairing the slope stabilization. It could potentially be a total bridge replacement, depending on the outcome of the study.

The proposed work for Bridge 1-394S will consist of minor repairs to the approaches and possible slope stabilization.

**PROJECT JUSTIFICATION:** The existing Bridge 1-394N is a six-span concrete slab bridge and is in moderately poor condition. All of the existing concrete piles need to be rejacketed to protect them from further deterioration. A few of these piles also need to be repaired for concrete delaminations. The existing concrete abutments and wingwalls have areas of spalling that need to be addressed. The slope stabilization protection also needs to be repaired. Bridge 1-394N is currently ranked 103<sup>rd</sup> out of 1,399 on the bridge deficiency list (via the bridge management program).



The approaches to Bridge 1-394S are in need of repair due to erosion of the embankment caused by a meander in the river. This bridge is also located adjacent to Bridge 1-394N with a ranking of 350<sup>th</sup> out of 1,399 on the bridge deficiency list (via the bridge management program).

County: Municipality: Funding Program: Functional Category: Representative District: Senatorial District: New Castle

Road System – Bridges Preservation 8, 9 14





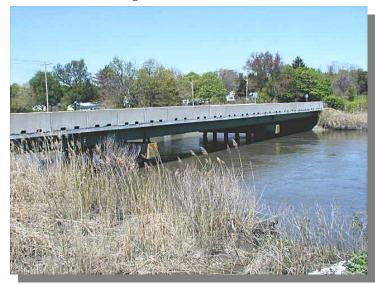
### CAPITAL TRANSPORTATION PROGRAM

### BR 1-394N AND BR 1-394S ON US 13 OVER DRAWYERS CREEK (CONTINUED)

# Bridge 1-394N



Bridge 1-394S



Inside Bridge 1-394N



Underside of Bridge 1-394S



#### BR 1-394N AND BR 1-394S ON US 13 OVER DRAWYERS CREEK (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 12/31/04	Expended as of 12/31/04	Committed Unexpended as of 12/31/04	Authorization Available
BR 1-394N and BR 1-395S on US 13 over Drawyers Creek		\$ 420.0						
Prior Years	State			\$ 420.0	\$ 420.0	\$ 81.1	\$ 338.9	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 420.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2006 Request	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2008 Projected	State			\$ 0.0				\$ 0.0
F 1 2008 Frojected	Federal			<u> </u>				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2009-2011 Projected	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 420.0	\$ 420.0			\$ 0.0
	Federal			\$ 0.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 420.0	\$ 420.0	\$ 420.0	\$ 420.0	\$ 81.1	\$ 338.9	\$ 0.0

### BR 1-394N AND BR 1-394S ON US 13 OVER DRAWYERS CREEK (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
23-071-02	BR 1-394N and BR 1-394S on US 13 over Drawyers Creek	PE RW	100% ST 100% ST	\$ 420.0 0.0	\$ 420.0 0.0	\$ 0.0 0.0	\$ 0.0 0.0		\$ 0.0 0.0	\$ 0.0 0.0
		С	80% FHWA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 420.0	\$ 420.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

#### BR 1-431 ON SR 15, DEXTER'S CORNER ROAD, SOUTH OF TOWNSEND [Project No. 23-071-05]

**PROJECT SCOPE/DESCRIPTION:** The proposed work on Bridge 1-431 will consist of realigning and reconstructing the existing roadway approaches to meet current design standards. Included in this realignment will be the removal and replacement of the existing concrete structure with a new precast concrete box culvert and wingwalls. Riprap will also be placed to protect the stream and structure from the effects of scour.

**PROJECT JUSTIFICATION:** The existing bridge is a concrete box that was extended on both sides with corrugated steel pipes and concrete masonry. The concrete box is in poor condition due to several delaminations present in the structure. The existing concrete masonry is also in poor shape and should be replaced. The steel pipes have corrosion at the waterline that will continue to deteriorate. This bridge is currently ranked 401<sup>st</sup> out of 1,399 on the bridge deficiency list (via the bridge management program).



County: Municipality: Funding Program: Functional Category: Representative District: Senatorial District: New Castle

Road System – Bridges Preservation 8 14





# BR 1-431 ON SR 15, DEXTER'S CORNER ROAD, SOUTH OF TOWNSEND (CONTINUED)



Bridge 1-431



#### BR 1-431 ON SR 15, DEXTER'S CORNER ROAD, SOUTH OF TOWNSEND (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 12/31/04	Expended as of 12/31/04	Committed Unexpended as of 12/31/04	Authorization Available
BR 1-431 on SR 15, Dexter's Corner Road, South of Townsend		\$ 673.0						
Prior Years	State			\$ 130.5	\$ 130.5	\$ 35.8	\$ 94.7	\$ 0.0
Prior Years	Federal			\$ 130.5 \$ 470.0	\$ 130.5	\$ 35.8 \$ 35.6	\$ 94.7	<u> </u>
	Other			<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 1,185.5	\$ 175.4	\$ 82.9	\$ 0.0	\$ 82.9	\$ 92.5
	Federal			\$ 409.6	\$ 39.8	\$ 0.0	\$ 39.8	\$ 369.8
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
EV 2006 Damast	State							
FY 2006 Request	Federal							
	Other							
FY 2007 Projected	State							
	Federal							
	Other							
FY 2008 Projected	State							
1 1 2000 1 10jetetu	Federal							
	Other							
FY 2009-2011 Projected	State							
	Federal							
	Other							
Total Projected	State			\$ 305.9	\$ 213.4			\$ 92.5
	Federal			\$ 303.9	\$ 213.4 \$ 509.8			\$ 369.8
	Other			<u> </u>	<u> </u>			<u> </u>
Total All Funds		\$ 673.0	\$ 1,185.5	\$ 1,185.5	\$ 723.2	\$ 71.4	\$ 651.8	\$ 462.3

#### BR 1-431 ON SR 15, DEXTER'S CORNER ROAD, SOUTH OF TOWNSEND (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
23-071-05	BR 1-431 on SR 15, Dexter's Corner Road, South of Townsend	PE RW	80% FHWA 100% ST	\$   75.0 86.0	\$ 75.0 13.0	\$ <u>0.0</u> 73.0	\$ 0.0 0.0	\$ 0.0 0.0	\$ 0.0 0.0	\$ 0.0 0.0
		С	80% FHWA	1,024.5	512.5	512.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 1,185.5	\$ 600.5	\$ 585.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

#### BR 1-506 ON N399, CHESAPEAKE CITY ROAD OVER SUMMIT BRIDGE ROAD [Project No. 22-074-05]

PROJECT SCOPE/DESCRIPTION: Bridge 1-506 on N399, Chesapeake City Road began construction in FY 2004. The improvements include removing the existing hot-mix on the bridge deck, replacing the hot-mix with high performance concrete, rehabilitating the substructure, painting the beams and other safety improvements and incidental work. This project was awarded in December 2003 and construction began in summer 2004. Paving and overlay of N399, Chesapeake City Road from the Maryland State Line to SR 71, Red Lion Road will also be constructed with the bridge.

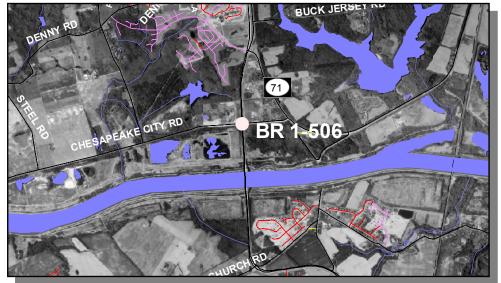
**PROJECT JUSTIFICATION:** The bridge is in need of repair to maintain its structural capacity and is currently ranked 153<sup>rd</sup> out of 1,399 on the department's bridge deficiency list (via the bridge management program).

New Castle

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**County: Municipality: Funding Program: Functional Category: Representative District: Senatorial District:** 





Road System - Bridges



### CAPITAL TRANSPORTATION PROGRAM

### BR 1-506 ON N399, CHESAPEAKE CITY ROAD OVER SUMMIT BRIDGE ROAD (CONTINUED)

Bridge 1-506 Over SR896

Bridge 1-506 Looking West





#### BR 1-506 ON N399, CHESAPEAKE CITY ROAD OVER SUMMIT BRIDGE ROAD (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 12/31/04	Expended as of 12/31/04	Committed Unexpended as of 12/31/04	Authorization Available
BR 1-506 on N399, Chesapeake City Road over Summit Bridge Road		\$ 1,465.5						
Prior Years	State			\$ 852.7	\$ 781.6	\$ 579.5	\$ 202.1	\$ 71.1
	Federal			\$ 612.8	\$ 237.5	\$ 174.7	\$ 62.8	\$ 375.3
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 1,465.5	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 71.1
112000	Federal		\$ 1,105.5	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 375.3
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2006 Request	State							
	Federal							
	Other							
FY 2007 Projected	State							
11200/110jetteu	Federal							
	Other							
FY 2008 Projected	State							
112000110jeeccu	Federal							
	Other							
EV 2000 2011 D	St. 1							
FY 2009-2011 Projected	State Federal							
	Other							
Total Projected	State			\$ 852.7	\$ 781.6			\$ 71.1
	Federal			\$ 612.8	\$ 237.5			\$ 375.3
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 1,465.5	\$ 1,465.5	\$ 1,465.5	\$ 1,019.1	\$ 754.2	\$ 264.9	\$ 446.4

### BR 1-506 ON N399, CHESAPEAKE CITY ROAD OVER SUMMIT BRIDGE ROAD (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
	BR 1-506 on N399, Chesapeake City Road over Summit Bridge Road	PE RW	80% FHWA 100% ST	\$ 75.0 699.5	<u>\$ 75.0</u> 699.5	\$ 0.0 0.0		\$ 0.0 0.0	\$ 0.0 0.0	
		С	80% FHWA	691.0	691.0	0.0	0.0	0.0	0.0	
	Total All Funds			\$ 1,465.5	\$ 1,465.5	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

#### BR 1-510 ON US 13, NORTHBOUND, SOUTH OF ODESSA [Project No. 23-071-06]

**PROJECT SCOPE/DESCRIPTION:** The proposed work for Bridge 1-510 will consist of replacing the existing concrete box culvert with a precast concrete rigid frame on piles. Riprap will need to be placed in the stream to protect the new structure and the streambed from the effects of scour. The roadway approaches will be reconstructed and new steel beam guardrail will be placed.

**PROJECT JUSTIFICATION:** The existing bridge is a concrete box culvert in poor condition. The concrete box culvert has many cracks, and several joints and at least one soffit are failing. The bridge is currently ranked 131<sup>st</sup> out of 1,399 on the bridge deficiency list (via the bridge management program).

County: Municipality: Funding Program: Functional Category: Representative District: Senatorial District: New Castle

Road System – Bridges Preservation 8, 9 14





# BR 1-510 ON US 13, NORTHBOUND, SOUTH OF ODESSA (CONTINUED)



Bridge 1-510

### BR 1-510 ON US 13, NORTHBOUND, SOUTH OF ODESSA (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 12/31/04	Expended as of 12/31/04	Committed Unexpended as of 12/31/04	Authorization Available
BR 1-510 on US 13, Northbound								
South of Odessa		\$ 1,044.0						
Prior Years	State			\$ 464.0	\$ 209.9	\$ 30.4	\$ 179.5	\$ 254.1
	Federal			\$ 630.4	\$ 630.4	\$ 110.0	\$ 520.4	
	Other			\$ 0.0	\$ 0.0	\$ 110.0	\$ 0.0	
	Other			\$ 0.0	\$ 0.0	÷ 0.0	\$ 0.0	
FY 2005	State		\$ 1,295.7	\$ 40.3	\$ 0.0	\$ 0.0	\$ 0.0	\$ 294.4
	Federal			\$ 161.0	\$ 161.0	\$ 0.0	\$ 161.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2006 Request	State							
	Federal							
	Other							
FY 2007 Projected	State							
F1 2007 Hojecteu	Federal							
	Other							
	Other							
FY 2008 Projected	State							
	Federal							
	Other							
FY 2009-2011 Projected	State							
	Federal							
	Other							
	-							
Total Projected	State			\$ 504.3	\$ 209.9			\$ 294.5
	Federal			\$ 791.4	\$ 791.4			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 1,044.0	\$ 1,295.7	\$ 1,295.7	\$ 1,001.3	\$ 140.5	\$ 860.8	\$ 294.5

### BR 1-510 ON US 13, NORTHBOUND, SOUTH OF ODESSA (CONTINUED)

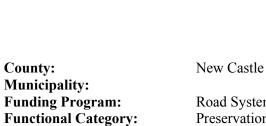
Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
23-071-06	BR 1-510 on US 13, Northbound South of Odessa	PE RW	80% FHWA 100% ST	\$ 124.0 306.4	\$ 124.0 306.4	\$ 0.0 0.0				
		С	80% FHWA	865.3	664.0	201.3	0.0	0.0	0.0	0.0
	Total All Funds			\$ 1,295.7	\$ 1,094.4	\$ 201.3	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

#### STATE OF DELAWARE

#### BR 1-600 ON SR141, FERRIS ROAD, OVER SR 2, KIRKWOOD HIGHWAY

PROJECT SCOPE/DESCRIPTION: The proposed work for Bridge 1-600 consists of rehabilitating the existing steel girder structure. The existing expansion joints will be replaced. Areas of spalling in the concrete substructure will be repaired. The existing concrete deck will be milled and replaced with a high performance concrete overlay.

**PROJECT JUSTIFICATION:** The existing structure is a two-span continuous steel girder bridge with a composite concrete deck. The bridge is in need of repair to maintain its integrity and to extend the life of the bridge. The heavy spalling on the substructure needs to be repaired. The expansion bearings and joints need to be replaced. The bridge is currently ranked 162<sup>nd</sup> out of 1,399 on the bridge deficiency list (via the bridge management program).



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**Funding Program: Functional Category: Representative District:** Senatorial District:

Road System – Bridges Preservation 12, 13





# BR 1-600 ON SR141, FERRIS ROAD, OVER SR 2, KIRKWOOD HIGHWAY (CONTINUED)



Bridge 1-600



### BR 1-600 ON SR141, FERRIS ROAD, OVER SR 2, KIRKWOOD HIGHWAY (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 12/31/04	Expended as of 12/31/04	Committed Unexpended as of 12/31/04	Authorization Available
BR 1-600 on SR141, Ferris Road over SR 2, Kirkwood Highway		\$ 1,750.0						
Prior Years	State			\$ 82.0	\$ 82.0	\$ 0.0	\$ 82.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005	State		\$ 1,750.0	\$ 333.6	\$ 251.6	\$ 0.0	\$ 251.6	\$ 82.0
	Federal		. ,	\$ 1,334.4	\$ 1,334.4	\$ 0.0	\$ 1,334.4	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2006 Request	State							
	Federal							
	Other							
FY 2007 Projected	State							
<b>.</b>	Federal							
	Other							
FY 2008 Projected	State							
<u> </u>	Federal							
	Other							
FY 2009-2011 Projected	State							
<b>.</b>	Federal							
	Other							
Total Projected	State			\$ 415.6	\$ 333.6			\$ 82.0
	Federal			\$ 1,334.4	\$ 1,334.4			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 1,750.0	\$ 1,750.0	\$ 1,750.0	\$ 1,668.0	\$ 0.0	\$ 1,668.0	\$ 82.0

### BR 1-600 ON SR141, FERRIS ROAD, OVER SR 2, KIRKWOOD HIGHWAY (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 -2011
	BR 1-600 on SR141, Ferris Road, over SR 2, Kirkwood Highway	PE	100% ST	\$ 82.0		\$ 0.0	\$ 0.0			
		RW	100% ST	0.0	0.0	0.0	0.0	0.0		0.0
		С	80% FHWA	1,668.0	0.0	1,668.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 1,750.0	\$ 82.0	\$ 1,668.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0