### NYSDOT/FHWA SEP 14 Pilot Program Job Order Contracts for Bridge Maintenance <u>Summary Report</u> <u>December 2008 to November 2012</u>

#### **Background**

In November 2007, the NYSDOT sought approval from the FHWA to use Federal funding for a non-determinate quantity, non-determinate location type contract for maintenance activities through the Federal "Alternative Contracting" SEP-14 program. A three year pilot program to contract element-level bridge maintenance activities using the Job Order Contracting (JOC) was approved on December, 2007. Federal funding for element level bridge repair was made available through the Highway Bridge Program.

Job Order contracting is based on a catalog of prices for a sundry of maintenance related activities. Each activity is estimated using local labor, equipment, and materials costs. Contractors bid a factor to be applied to the catalog, referred to as the Construction Task Catalog (CTC). The factor represents the contractor's overhead and profit margin. Two factors are established; one for Normal Work Hours (Item 636.01), the second for Other Than Normal Work Hours (Item 636.02). Job orders consist of a list of CTC activities and costs multiplied by the appropriate factor. Contractors perform a series of job orders during the duration of the contract. Payments are paid by lump sum at the acceptance of each job order.

#### Timetable: December 2008 to November 2011

The first federal-aid JOC was awarded on December 4, 2008, signaling the beginning of the three year pilot. The following is a summary of contract progress from the initiation of the first federal-aid contract through to November of 2012. The three year pilot was extended for an additional year.

On March 5<sup>th</sup> 2009, a second federally-aided bridge JOC contract (D261063) was let. The contract was awarded on March 26<sup>th</sup>, 2009. Between May 21<sup>st</sup> and June 18<sup>th</sup>, 2009, four more federally-aided (ARRA) bridge JOCs (D261152; D261160; D261161; D261205) were let.

In June of that year, the NYS Office of the State Comptroller (OSC) expressed concerns regarding administration and rapid expansion of the JOC program in NYSDOT. Multiple JOC contracts with similar scope, project limits, and schedules; payment to the contractor for field administration costs (engineers field Offices, office supplies, cell phones, etc);, and the lack of documented guidance on the design and administration of the JOC contracts were some of the issues expressed by OSC. Extensive discussions regarding NYSDOT's administration of the JOC program between the agencies occurred between June 2009 and April 2010. OSC requested the Department provide specific guidelines for the design, scoping, and administration of JOC contracts. During the development and acceptance of this guidance document, the administrative processing of JOC contracts was deferred. In April 2010, OSC approved the

Department's "JOC User's Guide" (JUG) and the processing of JOC contracts resumed. The four federally funded (ARRA) projects were awarded prior to the approval of the JUG but not until most of the 2009 construction season had passed.

Ten bridge JOCs were being reviewed for contract award during the period. Four contracts were "pulled" from the letting schedule and funding was exchanged for more established contracting vehicles. Orders on contracts for previously award JOCs were not processed until the approval of the JUG.

Between December 3<sup>rd</sup>, 2009 and October 14<sup>th</sup>, 2010, the Department did not let any JOC contracts. The last two federally aided bridge JOCs (D261718; D261736) were let on May 19<sup>th</sup>, 2011 and awarded on July 28<sup>th</sup>, 2011.

#### Timetable: November 2011 to December 2012

The consultant contract to support the JOC program was scheduled to expire on February 1<sup>st</sup>, 2012. As several JOCs contracts were still active, the Department requested an eleven month extension the consultant contract (C012510) to December 31st, 2012. This would allow the chance to complete the work and time to procure a new contract for consultant services. Active federally-aided contracts with remaining funds were allowed to remain active until the consultant contract expired.

Two simple but necessary procedures were introduced to facilitate management of the JOC program. A naming convention was established to allow for quick identification of all JOC contracts, and a policy to have the CTC delivered with the PS&E package (Plans, Specifications, and Estimate) was implemented. Administering and processing JOC contracts continues to have unique facets but those have become as workable as any other non-traditionally bid contract let by NYSDOT.

The NYSDOT Internal Audit Bureau's report entitled <u>Review of Job Order Contracts</u>, (May 2012), alleviated concerns with the acceptance and value of job order contracting both within NYSDOT and OSC. The objective of the JOC audit was to determine 1) whether JOCs provide a reasonable value for the work performed and 2) if NYSDOT was administering JOC contracts in compliance with the JOC User Guide (JUG). The audit concludes that JOCs are a cost effective vehicle for the maintenance and repair of highway infrastructure and the administration of the contracts is consistent with the rules and guidelines stated in the JUG.

FEDERALLY-AIDED JOB ORDER CONTRACTS – SEP 14 PILOT PROJECTS						
CONTRACT NUMBER	DESCRIPTION	DATE LET	DATE AWARDED	DATE COMPLETE	BID AMOUNT	
D260961	R8 Bridge JOC	12/04/2006	01/27/2009	01/18/2011	\$1,562,298	
D261063	R9 Bridge JOC; Tioga	03/05/2009	03/26/2009	04/20/2010	\$1,006,594	
D261152	R 7 Bridge JOC	05/21/2009	08/12/2009	07/31/2011	\$2,007,000	
D261160	R9 Bridge JOC: Broome, Chenango, Tioga	05/21/2009	08/12/2009	10/20/2010	\$990,975	
D261161	R9 Bridge JOC; Delaware, Otsego, Sullivan, & Schoharie	05/21/2009	08/12/2009	10/20/2010	\$968,413	
D261205	R3 Bridge JOC	06/18/2009	10/20/2009	08/20/2011	\$1,907,100	
D261718	R3 Bridge JOC	05/19/2011	07/28/2011	10/15/2012	\$902,052	
D261736	R7 Bridge JOC	05/19/2011	07/28/2011	10/15/2012	\$898,950	

**SUMMARY:** Eight bridge JOCs have been let with federal aid funding. Three of the 8 fed-aid JOCs, were active during the 2012 construction season.

The contract amount for the eight federally-aided bridge JOCs amounted to \$ 10,399,761. A total of \$ 8,517,287 was contracted (82% of the bid amount). None of the eight contracts were extended with an additional term. A total of 116 Job orders were issued. The average job order issued was for \$ 72,461. No disputes were filed.

A brief description of the eight federally-aided bridge JOCs is listed below. A complete list of Job Orders for each of the contracts is provided.

**Region 3, Syracuse**. <u>Contract D261205</u>; PIN 3M09.04. The project was let on 6/18/2009, awarded to Crane Hogan Structural Contractors 124 days later on 10/20/2009 for \$ 1,907,100.00. The contract was completed on 08/20/2011. The contractor bid 1.129 for Item 636.01 (Normal Working Hours) and 1.150 for Item 636.02 (Other Than Normal Working Hours). There were 3 bidders for the project. The average bid for Item 636.01 was 1.16 and 1.19 for Item 636.02. Three Orders-on-Contract were issued. The first was to add on demand work to perform steel repairs. The second OOC was to delete the first. The third OOC was to move available funds from the 636.02 items to the 636.01 item. This was a single term project. 24 job orders were issued. The contractor was paid \$1,476, 589 for an average job order value of \$61,525.

This was an ARRA (American Recovery and Reinvestment Act of 2009) contract. Due to delays the in the award, no work was performed on this contract during the 2009 construction season. In the spring of 2010, the contractor performed work on pedestals and substructures, removed and replaced bearings, deck joints and performed deck repairs.

<u>Contract D261718;</u> PIN 3M1104. This is federally aided project was let on May 19<sup>th</sup>, 2011 and awarded to Vector Construction for \$ 902,052.00 seventy days later on July 28<sup>th</sup>, 2011. The contractor's bid 1.068 for Item 636.01 and 1.088 for Item 636.02. There were six bidders for the project. The average bid for Item 636.01 was 1.13 and 1.18 for Item 636.02. No Orders-on-

Contract were issued. This is a single term project. The project was completed on October 15<sup>th</sup>, 2012. Four job orders were issued. The contractor was paid a total of \$ 345,336 for and an average job order value of \$ 172,668.

**Region 6, Hornell.** <u>Contract D260961</u>; PIN 6JOB.08. This is the first federally-aided bridge JOC. The project was let on 12/4/2008 and awarded to the L.C. Whitford Co. fifty-four days later on 1/27/2009 for \$ 1,542,297.62. The contractors bid 1.130 for Item 636.01 and 1.130 for Item 636.02. There were two bidders for the project. The average bid for Item 636.01 was 1.134 and 1.134 for Item 636.02. No Orders-on-Contract were issued. This is a single term project. The final completion date was Jan 18<sup>th</sup>, 2011. Additional time was added to the contact. The total paid to the contractor was \$ 1,358,347. Eighteen job orders were issued. The average of the job order is \$ 75,464.

**Region 7, Watertown.** <u>Contract D261152;</u> PIN 7804.76. Letting date 5/21/2009. The contract was awarded to Tuscarora Construction eighty-three days later on 8/12/2009 for \$ 2,007,000. The final completion date was 7/31/2011. This is an ARRA contract. The contractor bid factors are 1.210 for Item 636.01 and 1.260 for Item 636.02. No work was performed on this contract during the 2009 construction season. There were four bidders for the project. The average bid for Item 636.01 was 1.25 and 1.37 for Item 636.02. Two Orders-on-Contract were issued. The first OOC was for an extension of time from July 31, 2010 to July 31, 2011. The second OOC was for the allowable adjustment of the bid factors. This is a single term project. The total paid to the contractor was \$ 1,754,725. Fourteen job orders were issued. The average of the job order is \$ 123,377.

<u>Contract D261736</u>; PIN 780538. Letting date 5/19/2011. The contract was awarded seventy days later on 07/28/2011 to Economy Paving for \$ 898,950. The contract was completed on 10/15/2012. The contractor's adjustment factors are 1.085 for Item 636.01 and 1.126 for Item 636.02. There were five bidders for the project. The average bid for Item 636.01 was 1.16 and 1.27 Item 636.02. No Orders-on-Contract were issued. This is a single term project. The total paid to the contractor was \$ 783,795. Nine job orders were issued. The average of the job order is \$ 87,088.

**Region 9, Binghamton.** <u>Contract D261063</u>; PIN 9805.53. The project was let 3/5/2009 and awarded to C.P. Ward twenty-one days later on 3/26/2009 for \$ 1,006,594.21. The final completion date was 4/20/2010. The contractor bid 1.160 for both Items 636.01 and 636.02. There were two bidders for the project. The average bid for Item 636.01 was 1.22 and 1.29 for Item 636.02. One Order-on-Contract was issued to move funds from Item 636.02 to Item 636.01. This was a single term project. The total paid to the contractor was \$ 894,795. Seventeen job orders were issued. The average of the job order was for \$ 52,635.

<u>Contract D261160</u>; PIN 9805.66 was let 5/21/2009 and awarded eighty-three days later to R. DeVincentis and Sons on 8/12/2009 for \$ 990,974.65. The contract was completed on 10/20/2010. NYSDOT and the contractor agreed to execute the option to extend the contract another year, but the Order on Contract was retracted as discussions with OSC prolonged. This

was an ARRA contract. The contractor's bid/awarded Adjustment Factors are 1.142 for both Items 636.01 and 636.02. There were four bidders for the project. The average bid for Item 636.01 was 1.37 and 1.40 for Item 636.02. One Order-on-Contract was issued to move funds from Item 636.02 to Item 636.01. This was a single term project. The total paid to the contractor was \$ 975,213. Fifteen job orders were issued. The average of the job order is \$ 65,014. Work has included red flag culvert repairs, steel repairs, gusset plate repairs, and scour repair.

<u>Contract D261161;</u> PIN 9805.67 was let on 5/21/2009 and awarded eighty-three days later to R. DeVincentis and Sons on 8/12/2009 for \$ 968,413.05. The project was completed on 10/20/2010. NYSDOT and the contractor agreed to execute the option to extend the contract another year, but the Order on Contract was also retracted. This was an ARRA contract. The contractor bid 1.116 for both Items 636.01 and 636.02. There were four bidders for the project. The average bid for Item 636.01 was 1.41 and 1.44 for Item 636.02. One Order-on-Contract was issued to move funds from Item 636.02 to Item 636.01. This was a single term project. The total paid to the contractor was \$968,246. Sixteen job orders were issued. The average of the job order is \$ 60,515. Work has included structural flag repairs, red flag repairs, deck repairs and rehab.

#### FEDERAL AID BRIDGE JOCS, 3 YEAR PILOT PROGRAM

NYSDOT was given approval from the FHWA to use Federal Aid on Bridge JOCs on December 21, 2007 (12/21/07) under Special Experimental Project 14 (SEP 14), Innovative Contracting Practices pilot. The original approval was modified in February, 2009.

As per discussions with FHWA, the contract value of Federal Aid Bridge JOCs was capped at \$1 Million for one year in Regions 1, 2, 3, 4, 5, 6, 7, and 9 (upstate Regions). Total contract value could be \$2 Million in the upstate Regions and have a two year scheduled completion date. No extensions were allowed. The initial contract value of Federal Aid Bridge JOCs was capped at \$2.55 M for one year or \$5M for a two year contract in Regions 8, 10, and 11 (Metro Regions). A total of 30 bridge JOCs could be let under the pilot. Federally funded (FA) JOC contracts could be extended once.

#### **Additional JOC Remarks**

Subsequent to approval of the JUG, an additional administrative practice was introduced for all JOC contracts. A print out of the job orders with a description and dollar value is now included with all Order-on-Contracts and Final Agreements. The JUG has been revised to reflect that update.

<u>Discussion on Funding Options</u>: Though Regions had the opportunity to use federal aid to fund JOC contracts for bridges during pilot period, fifteen bridge JOCs were let using state dedicated funding (SDF) since the approval to use federal funds was granted totaling \$14.711M (bid amount). SDF has been used for maintenance contracting because 1) traditionally is was not approved for federal aid; 2) approval of the regional planning organizations on the use of federal funds for the maintenance of the state system: and 3) frequent revisions in the development of the capital programming.

<u>Discussion on Work Selection</u>: A descriptive title for each of the job orders is provided. The work orders are for maintenance and repair work consistent with the FHWA for the use of federal funds for element-level repairs on highway bridges.

Two of the contracts include a job order for a stand-by readiness item requiring the contractor to be prepared to respond to emergencies. The standby readiness item has been removed from all Construction Task Catalogs as of January 3<sup>rd</sup>, 2011 because of concerns raised by the Office of the State Comptroller.

ANTICIPATED LETTING SFY 2012-2013				
BRIDGE	HIGHWAY			
PIN 3M12.04 \$1.0M	PIN 3M11.00 \$0.5M			
PIN 5811.13 \$0.5M	PIN 9806.60 \$1.0M			
PIN 6JOB.12 \$1.0M	PIN 9806.61 \$1.0M			
PIN 9806.56 \$1.0M	PIN 8906.62 \$1.0M			
PIN 9806.57 \$1.0M	PIN 9806.63 \$1.0M			
PIN 9806.58 \$1.0M	PIN 8811.65 \$1.0M			
PIN 9806.59 \$1.0M	PIN 8811.66 \$1.0M			
PIN 8812.08 \$1.0M	CULVERT			
PIN 8812.09 \$1.0M	PIN 6JOC.12 \$0.5M			

<u>Discussion on JOC with NYSDOT</u>: The consultant contract to service JOC has expired. The Department is working toward award of a second consultant contract to continue the JOC

program. On May 16, 2012 a request for proposals for Job Order Contracting (JOC) Services for NYSDOT Contract #C030790 was posted.

Proposals were received on June 20, 2012. The Department elected to include a "piggy-backing" provision in the contract to allow other agencies to use the contract to support their JOC program.

The contract review process is

complete and a request for award of #C030790 will be forward to the OSC this SFY. Seventeen JOC contracts are slated for letting in the fourth quarter of state fiscal year 2011-2012.

Due to the concerns, delays, and programmatic efforts required for a small percentage of the construction program, the future of job order contracting in NYSDOT was unclear in early 2012. Regional managers, however, found JOC to be a useful method for contracting maintenance repairs and called for a continuation of the program. Though it has taken some time, JOC has proved to be a useful delivery tool for the maintenance and repair of the highway system.

#### **Specific Items of Interest:**

#### Can JOC contracts help the Department meet the forecasted bridge preservation needs?

NYSDOT has adopted a "preservation first" investment strategy in order to meet the maintenance and repair needs of the state's infrastructure. Job Order Contracting has become one of the tools, selected by the Regions, to deliver the investment in preservation. This is evidenced by five Regions requesting a total of 17 JOC contract lettings for the current state fiscal year. Those lettings are being pushed out to the fourth quarter as the Department awaits award of the consultant contract that supports JOC.

The traditional bidding process requires an accurate estimate of quantities. Estimating maintenance repairs on aged infrastructure is difficult. The JOC process provides the contractor a fair payment for the actual work performed without creating an administrative burden for the contract administrator.

#### Is the contracting community willing to accept the JOC format?

Two of the eight federal-aid bridge JOCs had only two bidders. One had six. On average there are 3.75 bidders on thee federal-aid JOCs. The average of the winning low bids for the eight contracts is 1.13 for Item 636.01 and 1.1465 for Item 636.02. The bids are competitive. Nearly all the bids for Item 636.01 (Normal Working Hours) are below 1.21 (the standard used in Force Account contracts (10% overhead and 10% profit). The exception is D261152. Bidders may have been concerned with the \$2M value over the one year term.

## What changes in contract language would be necessary to meet Federal Title 23 requirements?

JOC contracts contain the same Federal Title 23 requirements that all NYSDOT contracts contain.

#### What affect will these changes have in the administration of JOC contracts? Will the changes impact the JOC process?

As JOC contracts are administered similarly as all NYSDOT contracts, the Federal Title 23 requirements do not impose any impacts to the JOC process.

#### What other transportation activities could be effectively contracted through JOC?

NYSDOT has let JOCs for highway, drainage, and overhead sign repairs. There has been some preliminary discussion on the possibility of scoping an element level highway repair contract that meets federal aid requirements. Another is for contracted traffic control services for bridge inspection and repair work.

#### Can JOC contracts be scoped to meet Federal-aid requirements for additional assets?

Yes. This would require additional discussions with FHWA, the Office of the State Comptroller and based on the needs of the Department.

#### Can JOC be used for federally-eligible highway preservation and maintenance projects?

Yes. Examples of federal-aid eligible maintenance actions include: roadway activities such as joint repair, seal coats, pavement patching, thin overlays, shoulder repair, restoration of drainage systems sign face cleaning, cleaning of drainage facilities, corrosion protection and safety enhancements such as the installation or upgrading of guardrail and end treatments, installation or replacement of traffic signs and pavement markings, removal or shielding of roadside obstacles, mitigation of edge drop offs, rock–slope stabilization, the addition of paved or stabilization of unpaved shoulders, or installation of milled rumble strips.

#### How best can Federal requirements such as Buy America, Changed Condition clauses, Davis-Bacon wage rates, and MWBE participation be met?

Buy America requirements are listed in 106-11 – Buy America in the NYSDOT Standard Specifications. A standard note in contracts requires that all work performed is to be covered by and in conformity with the Standard Specifications.

The Standard Specifications include Changed Condition clauses. Work in a JOC contract is issued through work orders. In the event differing site conditions are encountered or a significant change in the quantity for an item of work is discovered, a subsequent job order is created. The practice can be seen in the list of job orders listed. No Disputed Work notices have been filed to-date for any of the 64 job order contracts awarded to-date.

Davis-Bacon requirements are administered in keeping with the Department's Manual of Uniform Record Keeping (MURK).

JOC contracts do not contain MWBE participation goals. This follows Department guidelines for maintenance contracts valued at \$1M or less. The indeterminate location/ indeterminate quantity nature of JOC contracts make it difficult to identify and pre-approve subcontracted work. Further, the size of the contracts may allow M/WBE participation as prime contractors.

#### **Evaluation and Measures**

## What are the staffing requirements for the oversight and administration of the JOC contracts?

JOC requires an administrator to prepare and prioritize requested projects. This is typically a staff person from the Operations Division. Staffing for the administration of the contract is similar to traditional contracts. In most cases an EIC and an inspector are assigned to the contract. Both the

EIC and the superintendant, however, are more involved in assessing the condition and determining the repair than in traditional NYSDOT construction projects.

#### Is the contractor able and willing to prepare job order proposals in a timely manner?

Contractors are able to prepare job orders in a timely manner. Initially a few contractor superintendants were slow to respond to the State's request for a proposal. Once they became comfortable with the pricing in the Construction Task Catalog, the turnaround time improved.

## *Is the Construction Task Catalog (CTC) thorough? Are the necessary items and quantities in the book?*

The consultant continues to improve the CTC. Although the catalog is extensive, a few items needed to be added or broken down further. During the reporting period the item for form and pour concrete repairs was modified to include fascia repairs and bridge access equipment items were tailored to include over-the-rail scaffolding. These items were included in CTCs of subsequent JOC contracts.

## Was the allowable mutually agreed upon extension requested for any of the Federal aid contracts?

None of the federal aid contracts were extended. Awards for four of the six contracts let in the in 2009 were delayed an average of 93 days as issues raised by OSC were resolved. The two contracts awarded in 2011 were not able to use the extension provision as the consultant contract supporting JOC was set to expire.

## *Can the benefits of the JOC contracting mechanism be quantified? What can be measured?*

The commonly voiced benefit of JOC is the ability to respond to a variety of needs at a reasonable cost. See the Internal Audit report.

#### Has all work performed meet the limits of programmatic categorical exclusion? Have the procedures listed in the Environmental Handbook for Transportation Operations been followed?

Each of the job orders is reviewed by the Department's Maintenance Environmental Coordinator and the Construction Environmental Coordinator prior to directing the contractor to perform the work.

# What are the limitations of JOC versus state forces work? How does JOC compare to traditional contracting methods used for preservation and preservation and maintenance work?

State forces are limited by personnel and equipment. The bridge JOC contractors are experienced and equipped to handle bridge projects. Traditional contracting requires considerably more administration effort to accommodate discoveries in the field. For instance, overruns for concrete removal and repair are common in maintenance. Changes in contract quantities are handled by a subsequent job order whereas adjustments in traditional contracts may require agreed price negotiations or force account records.

#### How can cost savings and/or time savings be determined?

Project costs for similar work using traditional contracting means, force account records, and JOC. The trick is finding comparable work. Refer to the Internal Audit report for more detailed information.

## How does the quality of the work compare to that done by state forces or traditional contracting methods?

The quality of work done by JOC contractors is equal to that of state forces efforts and other contracting methods.