



**METROPOLITAN GOVERNMENT OF
NASHVILLE AND DAVIDSON COUNTY**

OFFICE OF INTERNAL AUDIT

Professional Audit and Advisory Service

FINAL REPORT



**Audit of the Music City Convention Center Construction
Project**

**INTERIM REPORT V
DECEMBER 1, 2011 THROUGH JULY 31, 2012**

Date Issued: August 14, 2012

Office Location and Phone Number
222 3rd Avenue North, Suite 401
Nashville, Tennessee 37201
615-862-6110

*The Metropolitan Nashville Office of Internal Audit is an independent audit agency
reporting directly to the Metropolitan Nashville Audit Committee*

EXECUTIVE SUMMARY

August 14, 2012

Results in Brief	Background and Recommendations								
<p>The Metropolitan Nashville Office of Internal Audit performed an audit of the Music City Convention Center construction project. Key areas reviewed included:</p> <ul style="list-style-type: none"> • Administration of the Owner Controlled Insurance Program (OCIP). <p>Audit objectives and conclusions were as follows:</p> <ul style="list-style-type: none"> • <i>Overall, was the OCIP administered effectively by the Convention Center Authority Project Management and Development Staff and the OCIP Administrator?</i> <p>Yes. Procedures currently in place provide reasonable assurance that the program is managed efficiently and effectively.</p> <ul style="list-style-type: none"> • <i>Does the OCIP have sufficient funds and coverage for the remainder of the project?</i> <p>Yes. Estimates and projections based on prevailing averages and prospective program costs indicate that there is sufficient coverage and funds for the remainder of the program.</p>	<p style="text-align: center;">Owner Controlled Insurance Program As of July 31, 2012</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 30%; text-align: center;">Projected OCIP Costs</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">Budgeted Costs</td> <td style="text-align: right;">\$5,674,858</td> </tr> <tr> <td style="text-align: left;">Paid to Date</td> <td style="text-align: right;">5,025,021</td> </tr> <tr> <td style="text-align: left;">Cost to Complete</td> <td style="text-align: right;">649,837</td> </tr> </tbody> </table> <p>The OCIP budgeted program cost and projections were based on total labor costs (initially determined through actuarial tables and internal matrices at \$68 million). The overall project cost includes a \$750 thousand contingency to cover any overages between actual and estimated payroll cost.</p> <p>Key recommendations of this report include:</p> <ul style="list-style-type: none"> • Review and establish a specific OCIP program end date to coincide with the project completion and permanent insurance - identifying any potential cost impact. Additionally, the Convention Center Authority should: <ul style="list-style-type: none"> ➤ Consult with OCIP administrators to determine the impact of possible delays of the expected opening dates and potential increases in labor cost projections. ➤ Work with OCIP insurance carriers to ensure the return of the remainder of the security trust account once all construction activities have concluded and all obligations settled. 		Projected OCIP Costs	Budgeted Costs	\$5,674,858	Paid to Date	5,025,021	Cost to Complete	649,837
	Projected OCIP Costs								
Budgeted Costs	\$5,674,858								
Paid to Date	5,025,021								
Cost to Complete	649,837								

Table of Contents

INTRODUCTION.....	1
Audit Initiation.....	1
Project Status.....	1
Project Milestones.....	2
AUDIT ACTIVITY UPDATE.....	4
Background.....	4
OCIP Coverage.....	4
OBJECTIVES AND CONCLUSIONS.....	6
OBSERVATIONS AND RECOMMENDATIONS.....	9
A – Final Termination Date for the OCIP and the Effects of Related Events.....	9
GENERAL AUDIT INFORMATION.....	11
Statement of Compliance with GAGAS.....	11
Scope and Methodology.....	11
Criteria.....	11
Audit Project Staff.....	11
APPENDIX B. MANAGEMENT RESPONSE.....	12

INTRODUCTION

Audit Initiation

The continuous performance audit of the Music City Center construction is conducted as part of the approved 2011 Audit Work Plan. This is the fifth in a series of interim reports that will be issued throughout the duration of the construction project. These reports will culminate with a consolidated performance audit report at the conclusion of construction related activities. Significant observations and recommendations noted throughout these interim reports will be incorporated in the final report.

Project Status

Exhibit A - Project Budget Status as of July 11, 2012

<i>Description</i>	<i>Budget</i>	<i>Paid to Date</i>	<i>Paid Percentage</i>	<i>Cost to Complete</i>
Direct Construction Costs	\$451,574,757	\$354,340,729	78.5	\$97,234,028
Land Acquisition & Relocation Costs	57,000,000	71,057,563 ¹	124.7	4,020,269
Architectural Design & Engineering	40,659,684	37,955,256	93.4	2,704,428
CCA Project Management	10,993,758	7,195,753	65.5	3,798,005
Project Insurance & Programs	8,252,322	6,561,680	79.5	1,690,642
Legal, Financing, Audits, and Consultants	2,869,480	2,086,762	72.7	782,718
MCC Furniture, Fixtures, and Equipment	11,650,000	1,286,624	11.0	10,363,376
MCC Pre Opening Operations	2,000,000	-	0.0	2,000,000
Totals	\$585,800,000	\$480,484,367	82.1	\$122,593,466

Source: Convention Center Authority Project Financial Summary

¹ Increase in Land Acquisition and Relocation Costs were due to \$18 million escrow payments to Tower Investments.

Project Milestones

Significant project milestones as of July 31, 2012, include:

- With the installation of the last curtainwall, the building is officially “dried-in” or weather tight.
- Dehumidification by 61 air handling units is in process, in preparation for carpet installation.
- The daily average workforce is about 1,000 people.
- Exterior finish work continues.
- Materials for the ceiling in the ballroom, wood and metal panels, arrives on site. It is the most complex ceiling system in the building.
- The scaffold system over the grand lobby goes up in preparation for construction of the balance of the exterior soffits.
- Electrical testing of exterior under-soffit lights has begun.

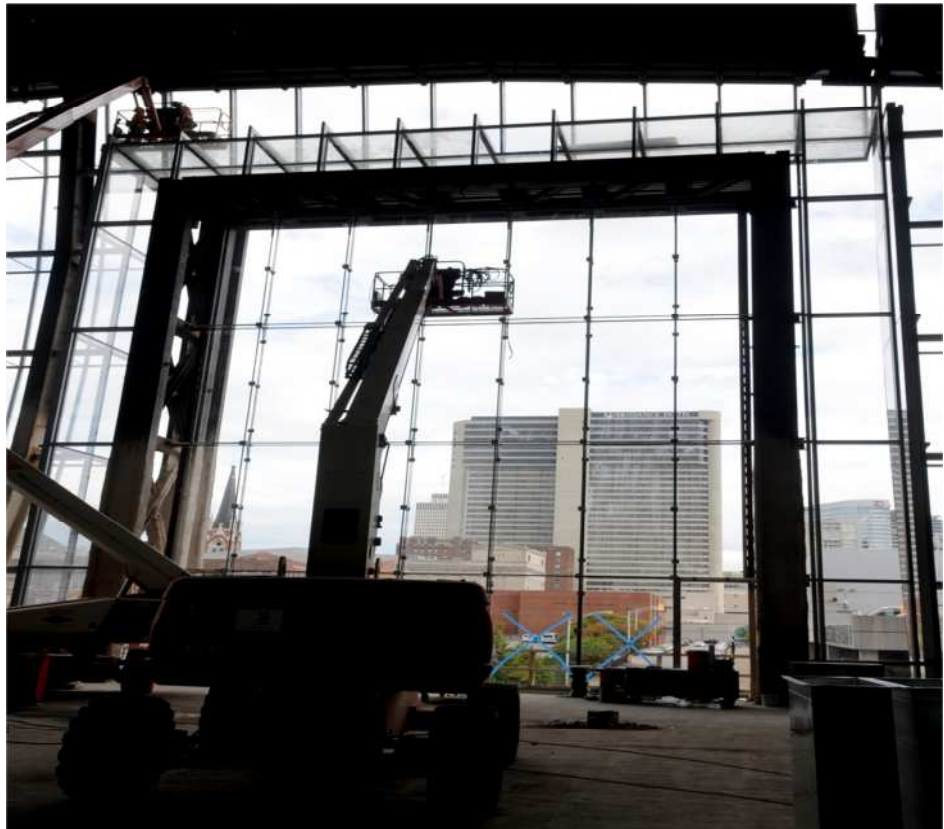
Exhibit B – Preparing the Meeting Rooms for Carpet Installation



Exhibit C – Detail Finishing of the Signature Roof Line



Exhibit D – Finalizing Interior Glass Installation at the Grand Lobby



AUDIT ACTIVITY UPDATE

Background

Although the OCIP has numerous advantages, the program also creates additional administrative burdens that require substantial efforts to manage.

The Owner Controlled Insurance Program (OCIP) is a single insurance program purchased by the sponsor (Convention Center Authority) to cover its project participants for activities that involve direct labor at the construction site. OCIP participants can include prime contractors, consultants, and their respective subcontractors as long as they are performing work at the sponsor designated construction premises. The OCIP provides project specific insurance coverage including: commercial general liability, umbrella/ excess liability, builders risk, employer's liability, and most importantly, workers' compensation.

In general, the OCIP is a way for the Convention Center Authority, prime contractors, and subcontractors to affect cost savings and add efficiencies during the construction of the Music City Center. Cost advantages are realized when bulk insurance is purchased which is generally cheaper than each contractor purchasing individual policies. Project efficiencies are accomplished by providing the following: (1) consistent and uniform insurance protection, (2) extended completed operations coverage, (3) a centralized loss prevention, safety, and claims handling program, and (4) a mechanism for mitigating the likelihood of inter-contractor litigations. Another side benefit of the program is how it enables and facilitates the implementation of the Authority's diversity business enterprise initiative. Through the *Bid Net Program*, smaller companies are able to participate in the bidding and construction process because on-site insurance requirements and costs are purposely excluded from the contractor's original scope of work.

OCIP Coverage

Exhibit E – Insurance Carrier and Coverage Detail

Insurance Carrier	Coverage
Hartford Insurance Company of the Midwest	Workers Compensation
Hartford Fire Insurance Company	General Liability
Zurich American Insurance Company of Illinois	Umbrella
Lexington Insurance Company	Excess – \$25M
National Union Fire Insurance Company of Pittsburg, PA	Excess – \$50M
Travelers Property Casualty	Builder's Risk

Source: Convention Center Authority and Office of Internal Audit Observation and Calculation

The table on Exhibit E delineates the responsible parties with regard to the various elements of the OCIP. Workers Compensation account is comprised of a \$1 million pre-funded loss account and a \$1.6 million security trust; both are available to fund Worker's Compensation claims. Convention Center Authority's financial liability is capped at \$250,000 per incident; beyond which, the insurance coverage takes over.

Although the OCIP has numerous distinct advantages, the program also creates additional administrative burdens that require substantial efforts to manage. Only with an effective underlying support program can the approximated cost benefits be realized.

To provide assurance whether program objectives are being met, the audit focused on determining the following:

- Contractor and subcontractor compliance with program requirements.
- The presence of an underlying safety program and sufficiency of program funding and coverage through project completion.
- Overall management and administration of the OCIP.

OBJECTIVES AND CONCLUSIONS

1. *Was the OCIP administered effectively by the Convention Center Authority Project Management and Development Staff and the OCIP Administrator?*

Yes. The ultimate benefits that can be derived from an owner controlled insurance program lies in the cooperation of various involved parties and the successful implementation of interrelated support functions. Coordination and communication is critical in delivering the desired outcomes.

During the course of assessing the management and administration of the OCIP, assurances that the program is managed effectively and efficiently were observed through the evaluation of both quantitative and qualitative evidence. The review highlighted several commendable attributes observed, namely:

- The existence of a robust general contractor safety program that includes safety training and education; functionally supporting the OCIP.
- Proactive consultations of workplace safety with the Tennessee Occupational Safety and Health Administration.
- The presence of an on-site medical trailer, staffed with personnel experienced in emergency medical procedures.
- Established protocols for reporting on-site injuries, incidents, or accidents.
- Prequalification reviews of potential enrollees to the program by the OCIP administrators and insurers.
- Diligent recordkeeping and documents management by the OCIP administrator.
- Completeness of status reports and periodic updates of current claims as well as active medical case management.
- Active medical case management that tracks claimant's recovery progress, eventual return to work, or indemnification if injuries are serious.
- Claims costs and expenses that are within budgeted projections.

In its entirety, all the acquired, reviewed, and observed data indicates that the OCIP is achieving its goals and objectives as designed. However, considering the magnitude of the project and the time remaining until project completion, there is no room for complacency. Continued vigilance and preemptive safety measures are needed to avert calamitous incidents that could adversely impact project goals and projected costs (see Observation A).

2. *Were contractors compliant with the OCIP requirements?*

Yes. Judgmentally selected contracts were designated for documentary reviews and the results indicated that contractors were in compliance with OCIP requirements.

A sample of 32 contractors and subcontractors from a pool of 139 were reviewed for program compliance as they pertained to agreement with OCIP enrollment requirements, off-site insurance (existence, validity, and amount of coverage), and recurring payroll submissions. The accuracy and completeness of the documentation by contractors, whether enrolled or not, was attributable to the diligent recordkeeping and persistence to compliance by the OCIP administrator. Reviews did not find any exceptions and no other issues were noted. Exhibit F below provides summary results of the review.

Exhibit F – Document Review Summary Results

	Count or Amount
Contracts Reviewed ²	44
Enrolled Contractors	28
Non-Enrolled Contractors	4
Contracts in Compliance with Program Requirements	44
Total Contract Value Reviewed	\$ 47,574,353

Source: Willis of Tennessee and Office of Internal Audit Reviews

3. *Does the OCIP's pre-funded account have adequate reserves for the balance of the project?*

Yes. Calculations and projections based on project historical average costs, trends in the number of claims, and an OCIP termination of April 5, 2013, indicated that the potential average exposure was between a minimum of \$164,000 and a maximum of \$275,000 in incurred costs for the remaining 41 weeks³. As of June 25, 2012, paid and incurred costs were \$633,000 and \$ 1.06 million respectively (incurred costs are cost projections by the insurance carrier based on the extent of worker injuries, estimated medical expenses, and other indemnification). Analysis would indicate that overall claims can range from \$1.17 million to \$1.34 million.

² Some subcontractors reviewed performed work for multiple prime contractors.

³ Analysis was conducted based on cost information available on June 25, 2012, program starting date of April 5, 2010, and program termination date of April 5, 2013.

As with any projections, the provided estimates were based on historical averages for the number of weekly claims and the costs associated with those claims. Based on current projections, and barring a catastrophic event or extensive time and construction delays, there should be sufficient amounts in the pre-funded account and the security trust account to cover the remainder of the project. In the event that projections approximate the actual costs, the Authority should endeavor to work with the insurer to obtain the remaining funds in the trust account once all obligations have been met (see Observation A).

OBSERVATIONS AND RECOMMENDATIONS

A – Final Termination Date for the OCIP and the Effects of Related Events

There are several events or combination of events that can potentially have an impact the OCIP program as a whole as follows:

- The first uncertainty pertains to, the lack of a definitive termination date for the OCIP. Although April 5, 2013, was the stated end date on the manual, prevailing conditions will necessitate an extension or a modification of that date. Working with the OCIP administrators in setting a firm end date would help ensure that effects of potential risks, which normally arise near the end of a construction project, are minimized.
- Additionally, because program cost and projections are based on total labor costs (initially determined through actuarial tables and internal matrices at \$68 million), increases in projected finish dates, change orders, additions, and unexpected delays due to external causes (such as material shortages) may adversely affect program costs. Determining the effects of these events, and working with the OCIP administrators to address these concerns is essential to the ultimate success of the program.

Criteria:

- Music City Center Controlled Insurance Program Manual 2010
- Stipulations contained within the various insurance policies on Exhibit E
- Prudent business practices

Risks:

- Increases in the number of fraudulent claims as the project reaches conclusion.
- Complacency and lessened emphasis on workplace safety as project nears completion.

Recommendation:

The Convention Center Authority's project management team should work with the OCIP administrator and support functions to:

1. Provide a definite closing date for the OCIP.
2. Determine the effect of increased project time and labor man-hours on OCIP costs.
3. Determine the recoverability or return of the remainder of the security trust account after the conclusion of construction related activities.

4. Continue the vigilant and proactive approach to workplace safety until the convention center receives its certificate of occupancy.

GENERAL AUDIT INFORMATION

Statement of Compliance with GAGAS

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform our work to obtain sufficient, appropriate evidence to provide a reasonable basis for our observations and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observations based on our audit objectives.

Scope and Methodology

The audit period focused primarily on the time encompassing the beginning of on-site construction activities from April 1, 2010, through July 31, 2012, and the performance on the processes in place during the time of the audit. To perform the review and the test of details, the Office of Internal Audit conducted interviews, obtained copies of contracts and insurance policies, performed document examination, and conducted projections to assess the state of the OCIP.

Criteria

In conducting this audit, the existing processes and controls to the Music City Convention Center OCIP were compared with:

- Music City Center Controlled Insurance Program Manual 2010
- Tennessee Occupational Safety and Health Administration – 20 Most Cited Construction Standards
- Tennessee Department of Labor and Development Occupational Safety and Health Administration Division, Consultative Report on Nashville’s Music City Center
- Stipulations contained within the various contract insurance requirements on Exhibit E
- Prudent business practice

Audit Project Staff

Mel Marcella, CPA, CIA, CFE, CISA, CMA, In-Charge Auditor
Mark Swann, CPA (Texas), CIA, CISA, Project Quality Assurance

APPENDIX B. MANAGEMENT RESPONSE

- Management's Responses Starts on Next Page -



August 9, 2012

Mr. Mark Swann
Metropolitan Auditor
222 Third Avenue South, Suite 401
Nashville, TN 37201

RE: Audit of the Music City Convention Center Construction Project (interim report 8/1/10-10/31/10)

Dear Mr. Swann,

I write to acknowledge receipt of the audit report for the Music City Center Construction Project (interim report 12/1/11-7/31/12), by the Metropolitan Government's Office of Internal Office, my review of the audit report, and its recommendations.

I concur with the findings and have provided a response to each recommendation. I have also assigned responsibility and completion date to address each item.

We appreciate the review and the ability to improve our operations and reporting.

Sincerely,

Ryan P. Johnson

The Convention Center Authority of the Metropolitan Government of Nashville & Davidson County
413 Fifth Avenue South ♦ Nashville, TN 37203 ♦ 615-880-1450

**Audit of the Music City Convention Center Construction Project
Management Response to Audit Recommendations**

Audit Recommendation	Response to Recommendation / Action Plan	Assigned Responsibility	Estimated Completion
<p>A. The Authority's project management team should work with the OCIP administrator and support functions to:</p> <p>1. Provide a definite closing date for the OCIP.</p>	<p>Accept. We are in the process of determining the closing date already with the OCIP administrator. Likely to be Substantial Completion Date.</p>	Ryan Johnson	4Q12
<p>2. Determine the effect of increased project time and labor man-hours on OCIP costs.</p>	<p>Accept. In process. Currently working to determine exact amount of remaining labor cost which dictates OCIP premiums. Current estimates (\$200K approx.) well within project insurance contingency of \$750K.</p>	Ryan Johnson	Final premium amount is settled at close out 3Q13
<p>3. Determine the recoverability or return of the remainder of the security trust account after the end of construction activities.</p>	<p>Accept. In process. We have planned to discuss this topic in detail with OCIP administrator at substantial completion. At that time, we will review any outstanding claims and begin the dialogue with Hartford to release any funds that are over and above anything need for the outstanding claims. OCIP Administrator believes it likely for funds to be released at that time.</p>	Ryan Johnson	3Q13
<p>4. Continue the vigilant and proactive approach to workplace safety until the convention center receives its certificate of occupancy.</p>	<p>Accept. In process. We work closely with Bell Clark and their subs to maintain a safe workplace</p>	Ryan Johnson	On going