



ASSESSING THE MTA CONTRACTOR SAFETY INCENTIVE PROGRAM (CSIP)

Barry L. Kluger
MTA Inspector General
State of New York

OVERVIEW

The Metropolitan Transportation Authority (MTA) utilizes Owner Controlled Insurance Programs (OCIP) to obtain bulk rate savings for insurance coverage against personal injury and property damage claims associated with the construction projects of three of its constituent agencies – New York City Transit (NYC Transit), the Long Island Rail Road (LIRR), and Metro North Railroad (MNR). To further reduce its insurance costs, the MTA, through its Risk & Insurance Management (RIM) department, oversees contracts with several outside safety management firms that regularly inspect the three agencies' construction sites to detect safety violations that could lead to construction accidents.

Seeking to reduce the cost of accident claims even further, RIM conceived and designed its Contractor Safety Incentive Program (CSIP) in 1998. Under CSIP, RIM offered monetary rewards to contractors when it believed that eventual accident costs would fall below the target established for each construction project. CSIP also allowed RIM to assess financial penalties when it forecast that accident costs would exceed its estimates.

The Office of the MTA Inspector General (OIG) conducted a review of the CSIP program. During the period reviewed, RIM distributed approximately \$3 million in rewards to and assessed \$500,000 in penalties against contractors associated with 57 NYC Transit¹ construction contracts, resulting in a net program cost of approximately \$2.5 million.

Inappropriate CSIP Program Design

Although RIM uses industry accepted standards for estimating potential losses, we found that its methodology for determining if a contractor is eligible for safety incentives is too imprecise. As a result, RIM's CSIP computations for 19 of the 57 contracts we reviewed resulted in \$722,322 in higher rewards and lower penalties beyond what was supported by the contractors' actual safety performance. The \$722,322 portion of the incentives computed for these 19 contracts, representing almost 30 percent of the net program costs, resulted from the following causes:

1. Underestimated Accident Claim Losses

Because many accident claims are not settled until years after the construction work has ended, RIM relied on interim estimates of the eventual total Accident Claim Losses (ACL)

¹ Since 2005, NYC Transit has been the only MTA constituent agency participating in CSIP. According to RIM officials, MNR and LIRR previously opted out of the program.

on the project to perform its eligibility computations. Our tests found, however, that these interim ACL values frequently underestimated the final claim costs and thus provided an inaccurate indicator of contractors' eligibility for CSIP incentives. In this regard, we identified six contractors who were overpaid more than \$525,000 in safety rewards and 10 others who were undercharged \$140,000 in safety penalties because RIM procedures utilized interim accident costs to compute CSIP incentives.

2. Computation Errors

Apart from underestimation of accident claim values, in at least three instances RIM made errors in computing the CSIP incentives, resulting in an additional cost of more than \$56,000. In one of these cases, a single computation error caused RIM to pay more than \$23,000 in undeserved safety incentives to a single contractor.

3. Under-Utilized Computation Time

Although the MTA retains the contractual right to delay issuing reward incentives for up to 18 months after the close of contracts, RIM computed most CSIP incentives within six months after the close of the contracts. We found that more than \$34,000 in reward payments could have been avoided if RIM had utilized the full 18-month window to update the contractors' accident costs.

It should be noted that our findings may not capture the full extent of CSIP losses, as RIM could not provide any documentation to support their incentive computations for 16 additional contracts worth \$129.3 million, which we sought to review. These record keeping deficiencies prevented our analysis of the appropriateness of the rewards paid and penalties assessed for the 16 contracts.

Commensurate with its policy to offer financial incentives to contractors who can contain the cost of accident claims against the MTA, RIM bears the responsibility of ensuring that recipients actually merit the CSIP rewards and penalties they receive. While acknowledging that most CSIP incentives that we reviewed were properly computed and merited by the contractors' safety performance, we believe that RIM's reliance on interim accident cost data generated within 18 months of the contracts' closing to predict the final cost of claims virtually assures that a significant number of contractors will either be over-rewarded or under-penalized. As such, we advise the Authority to discontinue CSIP incentives on future construction projects unless RIM can devise new procedures to substantially improve this program. We further recommend that the MTA initiate negotiations with contractors already awarded approximately \$2 billion in NYC Transit capital contracts still covered by CSIP to remove or at least reduce incentive obligations from the Authority.

Verifying Safety Monitor Charges

In addition to our review of CSIP, we examined RIM's process for scrutinizing the inspection invoices of safety management firms employed by the MTA's outside insurance broker. Our review identified several deficiencies in inspection invoices submitted during the last quarter of 2008, including 116 instances of missing inspection reports, duplicate report components, and computational errors related to invoices submitted during this period. Following a detailed review of the discrepancies, RIM provided missing substantiation and clarified inaccuracies to establish that fortunately only a nominal over-billing for inspection services had actually occurred. Upon our recommendation, RIM has also adopted several major changes in its invoice review process to ensure that future charges are properly supported.

Recommendations

1. Unless RIM can substantially improve its methodology for assessing contractor eligibility for safety incentives, the MTA should abolish the CSIP program for all future contracts and should initiate negotiations with contractors to remove or at least reduce the Authority's contractual incentive obligations from current contracts still covered by CSIP.
2. To further limit the possibility of incentive overpayments to contractors still covered by CSIP, RIM should institute the following internal controls:
 - Senior RIM managers must verify the existence of documentation for all construction cost and ACL data employed for computing safety incentives as well as the accuracy of the computations themselves;
 - RIM must retain documentation to support all CSIP incentive computations; and
 - Final CSIP reward payments should be issued no earlier than the end of the 18-month consideration period.
3. RIM and its insurance broker must more closely scrutinize safety monitor inspection charges submitted to the MTA for reimbursement, and certify that such charges are properly documented, complete, and accurate.

We supplied a draft copy of this report to both MTA and RIM officials for their review of our findings and recommendations. With regard to our first recommendation, RIM officials agreed to re-assess their current guidelines for determining safety incentives and to seek alternative procedures that could mitigate the financial risks associated with contractors still covered under the CSIP program. They also agreed that, pending their re-assessment, all CSIP program provisions have been removed from contracts under the 2005 – 2009 MTA Capital Program that have not yet been awarded. The agency fully accepted our second and third recommendations and has agreed to implement such procedures as part of its internal controls for both CSIP and the inspection of MTA construction sites.

BACKGROUND

An Owner Controlled Insurance Program (known as an “OCIP” or a “Wrap-Up Policy”) is an insurance policy taken out by the owner of property where construction is scheduled to take place. The objective of an OCIP is to reduce the overall cost of insurance associated with construction based on the premise that insurance costs will decrease if purchased in bulk (covering all contractors under the same policy) rather than when each contractor purchases insurance on its own (and passes the cost on to the MTA).

The MTA Risk & Insurance Management (RIM) department administers an OCIP for capital construction projects awarded by New York City Transit (NYC Transit), Long Island Rail Road (LIRR), and Metro North Railroad (MNR). Currently, RIM obtains insurance coverage from private providers against general liability and workers’ compensation claims (accident claims) in excess of \$500,000. The MTA is self-insured for accident claims below \$500,000.²

In order to identify and resolve work site safety hazards that could lead to accident claims, RIM requires the MTA’s outside insurance broker, Project Technologies International (PTI or MTA Insurance Broker), to provide routine safety inspections at all OCIP construction sites. In this regard, PTI subcontracts with multiple safety management firms to perform the safety inspections. At the end of each month, the subcontractors bill PTI for their services, submitting copies of their safety inspection reports and other supporting documentation for their invoices. PTI, in turn, submits bills to RIM on a quarterly basis for reimbursement of the cost of the inspections.

Seeking to further reduce its insurance costs, RIM instituted its Contractor Safety Incentive Program (CSIP) in 1998 to provide cash bonuses (rewards) to contractors whose MTA work sites generate lower than expected accident claims. CSIP also enables RIM to issue fines (penalties) to contractors when accident claims exceed MTA expectations. Importantly, the size of a CSIP incentive depends on an *estimate* of the cumulative accident claims generated on the project (Accident Claim Loss or ACL) rather than on the *actual* ACL, which may not be determined until years after the construction work ends.

When determining contractor eligibility for CSIP rewards or penalties, RIM applied its own computation matrix that, depending on the construction costs for the project, set incentive values for a series of ACL ranges. For contractors whose cumulative accident claims are predicted to fall within the lowest ACL ranges, the matrix determines a specific reward amount that is subsequently issued under a separate CSIP check. For contractors with accident claims predicted to be in the highest ACL ranges, the matrix identifies a penalty to be charged to the contractor. The matrix also establishes a middle-level ACL range (“Not Qualified”) under which rewards or penalties are not deemed appropriate.

² During the 2000-2004 period we reviewed, the self-insurance threshold for accident claims related to NYC Transit Station Rehabilitation projects was \$250,000. It has since been increased to the same \$500,000 threshold applied for self-insuring all other capital projects.

Significantly, though, even as RIM employed interim ACL estimates to assess contractor incentives, it never verified that such estimates matched the final ACL.

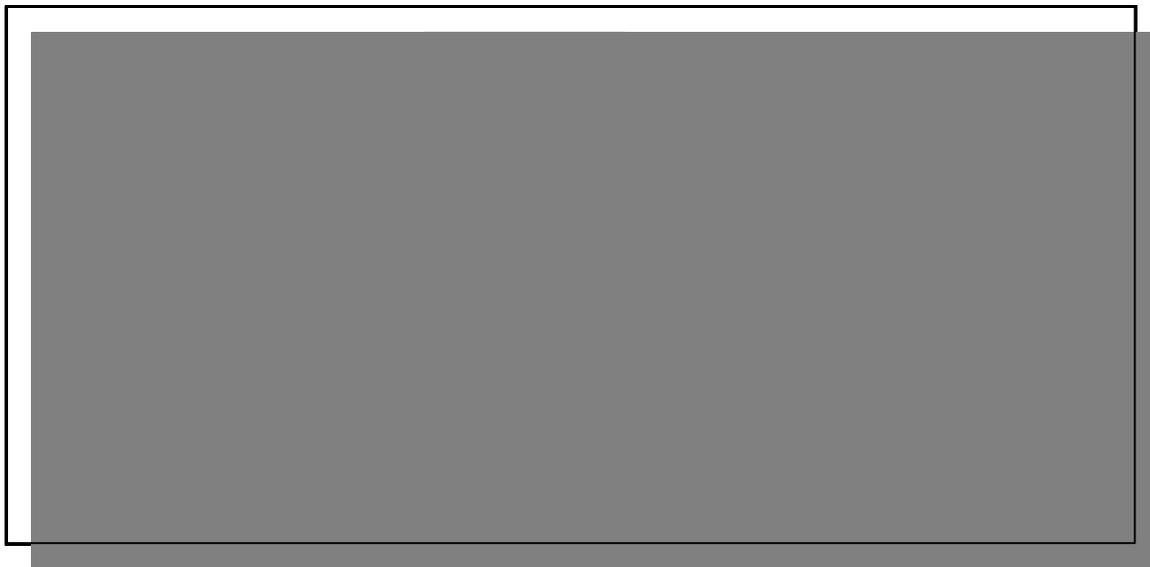
While CSIP provisions were originally designed to cover NYC Transit, MNR and LIRR, LIRR declined to participate in the program citing its unwillingness to devote capital funding needed for incentive payments to contractors. MNR later withdrew from CSIP in 2005 for the same reason. Because NYC Transit is currently the sole participant in RIM's CSIP Program, we focused our review of CSIP on contracts awarded by that agency.

During the period of our review, the computation and documentation of CSIP incentives related to NYC Transit contracts was handled exclusively by RIM's Manager for OCIP Financial Administration (CSIP Manager) who reported to RIM's Director and its Deputy Director for Risk Control and Reporting.

SECTION I: UNEARNED INCENTIVES AWARDED TO NYC TRANSIT CONTRACTORS

We reviewed 57 capital contracts worth \$1.8 billion that were awarded by NYC Transit between 2000 and 2004 and that were completed and assessed for CSIP by March 2009. By the end of our review period, RIM had paid out just under \$3 million in CSIP rewards and collected slightly more than \$500,000 in penalties based on \$27 million in accident claims generated by these contracts, as shown in Table 1.

TABLE 1:
CSIP Rewards / Penalties Related to 57 Sampled NYC Transit Contracts



Of the 57 contractors reviewed, we found that 19 received incentives that ultimately were not merited by their actual safety performance. In 16 of these cases, contractors received higher rewards (Overpayments) or were assessed lesser penalties (Undercharges) than they arguably deserved because RIM underestimated the final cost of accident claims generated during construction. In the remaining three cases, RIM issued incorrect incentives because the CSIP Manager made serious clerical errors during the computation process. The CSIP computation problems discovered during our audit are identified in the following subsections of this report.

Underestimated Accident Claim Losses

RIM uses the interim Accident Claim Loss data accumulated during the course of a construction contract by the MTA’s outside insurance broker as the sole factor in determining whether MTA contractors qualify for CSIP rewards or penalties. RIM’s reliance on interim ACL values within 18 months of contract closeouts, however, represents a significant flaw in the CSIP computation process because such values do not provide a reliable indicator of the final cost of accident claims for purposes of computing individualized dollar-value incentives. Rather, we find that the

interim ACL data employed by RIM frequently *understated* the cost of accident claims, thus exaggerating the safety performance of MTA contractors and inflating the incentives they ultimately receive.

To assess the reliability of this accident cost data used in CSIP computations, we compared the interim ACL values used by RIM³ when the incentives were originally computed to ACL values updated to March 2009 for the same contracts. Our comparison indicated that in 16 of the 57 contracts, the total cost of accident claims had risen dramatically after CSIP computations were performed. Specifically, the ACL values for the 16 contracts rose from \$8.8 million at the time the incentives were computed to \$13.5 million at March 2009, a 54 percent increase during this time period. While some of these cost increases occurred because additional accident claims were filed after incentives were awarded, a problem in itself, even worse the majority resulted from cost increases in claims already filed at the time the incentives were first computed.

Using RIM's own matrix to re-compute the CSIP incentives with more current ACL values than were available at the time incentive computations were first performed, we determined that the rewards paid in six contracts would have been reduced by \$525,723 had the updated ACL values been used to measure the contractors' safety performance. We also identified ten other contracts where penalties were undercharged by \$140,045 because the original CSIP computations underestimated the full future cost of the contracts' ACL. As such, the net loss to the MTA from the use of this approach was \$665,768, as shown in Table 2.

³ Our review indicated that RIM computed CSIP incentives for most of the 57 contracts sampled for this audit between 2005 and 2008 using ACL estimates created in consultation with the MTA's Insurance Broker.

Case Study #1

Contractor: Slattery/Gottlieb (Joint Venture)
Contract #: C-52003
Scope: Construction of New Fan Plants
at Albany and Rector St
Contract Value: \$41.9 million
CSIP Date: February 22, 2005

When RIM computed the CSIP incentive in February 2005, the MTA's insurance broker listed 31 accident claims (consisting of nine claims under general liability and 22 under workers' compensation) totaling \$167,717 filed against the contract. Based on this preliminary ACL value, the RIM computation matrix determined that the contractor was entitled to a reward payment of \$209,668.66. A CSIP check for that amount was subsequently issued to the contractor.

Our examination of accident claim records for the same contract as of March 2009 determined the total claim costs had increased by almost \$300,000 in the four years after the CSIP computation was performed. Most of this increase was attributed to a single workers' compensation claim valued at \$3,418 in February 2005. In the four years following the CSIP computation, however, the claim's value had increased to \$292,752.

Applying the higher ACL value to RIM's computation matrix, we determined that the contractor would not have qualified for even one dollar of the \$209,668.66 reward that it had been paid four years earlier.

We questioned RIM officials about the reliability of the interim ACL estimates that are so essential to the CSIP computation matrix. Although RIM's Director and Deputy Director stated that all appropriate insurance industry standards had been employed in the creation of accident claim estimates used in the incentive computation process, they acknowledged that such estimates can understate the final ACL, especially when final claims settlements occur years after the closing of the construction contracts. The officials chose to incorporate the interim estimates into the CSIP process, however, under the assumption that any inaccuracies in subsequent incentive awards would be more than offset by reductions in accident claim. This assumption had not been previously tested, however, as the officials acknowledged that they had not tracked subsequent increases in ACL values after CSIP computation nor obtained any evidence that the incentive program had actually reduced accident claims at MTA construction sites.

Under-Utilized Computation Time

Although RIM has the contractual authority to wait up to 18 months after the close of a contract to issue CSIP rewards, our review indicated the CSIP Manager in charge of overseeing NYC Transit contracts issued most payments within 6 months of contract closings. Our tests indicated that \$34,340 of the total reward Overpayment could have been avoided if RIM's analyst had waited the full 18-month after contract closings to issue final incentive payments. The most significant loss that resulted from RIM's hasty CSIP computation practice is presented in Case Study #2.

Case Study #2

Contractor:	Rosewood/AFC Enterprises
Contract #:	E-40800
Scope:	Construction at 6 locations on 8th Avenue Subway Line
Contract Value:	\$9.8 million
Contract Close:	June 20, 2006

In December 2006, six months after the close of the contract, RIM determined that only one claim (under workers' compensation) had been filed against the contract. This claim, listed as "open," had an estimated ACL value of \$52,074. Using the computation matrix, the CSIP Manager determined that the contractor was entitled to receive a \$46,517 CSIP reward and subsequently authorized a payment for that amount.

When we examined accident claim records for the same contract in December 2007 (the end of the 18-month limit for computing CSIP), we found that the estimated value of this open claim had risen to \$71,955, a 38 percent increase. Had the CSIP Manager waited until the end of the computation period, the subsequent increase in ACL value would have reduced the contractor's reward to \$29,379. Instead, RIM overpaid the contractor an additional \$17,138, or 58 percent more than required.

When we questioned RIM officials as to the timing of CSIP incentive computations, RIM's Director and Deputy Director stated that the incentive program offered the greatest opportunity to induce contractors to improve safety at their work sites when the incentives were meted out within just a few months of the close of the contracts involved. However, these officials acknowledged that they were unaware that increases in ACL during the 18 month period had reduced the appropriateness of the incentives already paid.

Errors in CSIP Computations

In order for the computation matrix to identify an appropriate CSIP reward or penalty, the CSIP Manager must correctly identify the contracts' construction costs and ACL values applicable to the month in which the computation is performed. In three of the 57 contracts we reviewed, the CSIP Manager made errors in his CSIP computations – errors that cost the MTA an additional \$56,554 in inappropriate and unnecessary incentive costs. One of these errors, resulting in \$23,085 in unearned reward payments, is described in Case Study #3.

Case Study #3

Contractor:	AFC Enterprises
Contract #:	E-31287
Scope:	Vent Rehab: Stanton St
Contract Value:	\$ 18.5 million
Contract Close:	November 9, 2006

In December 2006, one month after the close of the contract, RIM determined that \$159,076 in accident claims had been filed against the contractor. After utilizing this ACL value in the computation matrix, the CSIP Manager concluded that AFC Enterprises was entitled to a \$64,638 reward for their safety performance.

In re-checking the CSIP Manager's work, however, we discovered that the contractor should have received only \$41,553 in reward incentives based on this ACL value. After presenting our findings to RIM, the CSIP Manager acknowledged that his math error, made while using the computation matrix, had resulted in a \$23,085 Overpayment to the contractor.

In two other contracts we reviewed, we found that the CSIP Manager had made another significant error – inflating the construction costs of two contracts by \$17.2 million during his CSIP computations. RIM’s computation matrix assesses contractor CSIP eligibility based on the ratio between interim ACL values and the contracts’ construction costs. By inflating the two contracts’ construction costs,⁴ the CSIP Manager’s errors caused the matrix to undervalue the significance of the accident costs generated on the projects and thus limited the CSIP penalties that could be levied against the contractors. As a result, the penalties assessed against the two contractors were \$33,469 less than what they should have been, as shown in Table 3.

TABLE 3:
Impact of Inflating Construction Costs when Computing CSIP



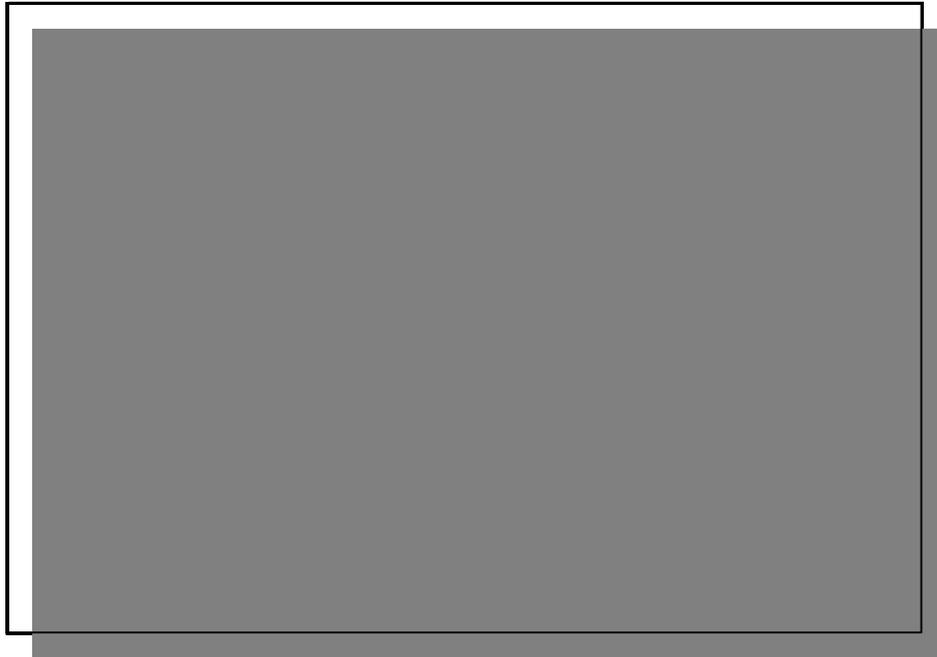
While the CSIP Manager acknowledged to the OIG that the rewards and penalties he computed in the examples described in Case Study 3 and Table 3 were incorrect, he could not explain how these errors had occurred or why he had not discovered them in time to prevent the resulting \$56,554 worth of Overpayments and Undercharges to the contractors involved.

Future of the CSIP Program

Taken together, the unnecessary CSIP costs stemming from underestimated ACL values and computation errors that we found totaled \$722,322, almost 30 percent of the total \$2.5 million in CSIP costs expended for the 57 cases we reviewed. As we note in Table 4, \$555,857 or 77 percent of the unnecessary costs were the direct result of accident claim losses that were originally underestimated by CSIP within the 18 month period after the close of the contracts, but then increased past this outside contractual limit for incentive computation.

⁴ In the two construction cost errors shown in this report, we determined that the CSIP Manager overstated the contract value by factoring in MTA design and administrative charges, which should not be included in CSIP computations.

TABLE 4:
Breakdown of Unnecessary CSIP Costs Identified by OIG



Mindful that improving safety at MTA construction sites is an important goal for the Authority, we asked RIM officials to explore options for mitigating the negative impact that interim ACL estimates had on accuracy of incentive computations. Although RIM officials agreed to examine ways to improve CSIP, they believed that the threat posed by ACL estimate problems was relatively small and within acceptable risk levels, particularly given the program’s potential to improve work place safety.

While we agree that the majority of CSIP incentives examined in the report reasonably reflected the safety performance of the contractors, we remain concerned that RIM authorized \$722,322 in rewards and penalties (30 percent of the total program cost) that were not justified by the full and complete cost of accident claims filed against the contractors. As such, we recommend that the MTA discontinue the CSIP program for all future contracts awarded by the Authority unless and until RIM bases these computations on more accurate accident claim data or otherwise ensures that incentives reflect actual performance.

Unfortunately, terminating this program will not entirely eliminate future incentive cost excesses. Approximately 51 NYC Transit construction projects worth more than \$2 billion are still covered by CSIP provisions. As these projects are completed, their contractors will benefit from the same error prone incentive computation process that we have noted in this report, making it possible that significant overpayment of rewards or undercharges of penalties will continue to occur.

As part of MTA efforts to deal with its current financial crisis, the Authority has recently re-negotiated the terms of significant capital contracts in an attempt to reduce unnecessary costs associated with them. We believe that the MTA should include the current contracts still covered by CSIP provisions within its re-negotiation strategy in an effort to remove or at least reduce its future incentive obligations.

To further reduce the size and frequency of undeserved incentives whenever possible, RIM also needs to address a series of internal control deficiencies detected during our audit that are listed below:

1. Premature CSIP Computations

As noted above, RIM computes most incentives within six months of the close of the contracts. By taking advantage of their contractual prerogative to wait 18 months after contract closing before issuing final CSIP rewards⁵, RIM could obtain an updated (and thus more reliable) estimate of the contractors' accident claim costs, thereby reducing the amount of overpaid rewards that result from premature CSIP computations.

2. Inadequate Record Keeping

Although we initially selected 73 NYCT capital contracts awarded between 2000 and 2004 for our review, several deficiencies in RIM's record keeping procedures limited our examination of agency's CSIP computations for the contractors involved.

Despite multiple requests for information, the CSIP Manager was unable to locate his case files related to 16 contracts (22 percent of those we requested) worth \$129.3 million. Without such files, the CSIP Manager said he was unable to identify whether CSIP rewards or penalties had been issued to the contractors involved.⁶ As a result of the missing files, our review was only able to focus on the remaining 57 contracts previously mentioned in this report.

When reviewing these 57 contracts, we discovered a second record keeping deficiency - RIM did not require computation documentation for 18 contracts that the CSIP Manager had categorized as "Not Qualified" (i.e., when the contractors' ACL values did not require either reward payments or penalty charges). Using an estimated ACL value derived from the RIM computation matrix, we were able to determine that 9 of the 18 "Not Qualified" cases actually merited CSIP penalties ranging between \$1,812 and almost \$49,000 (as previously shown in Table 2).

We strongly believe that such missing case files and failure to document "Not Qualified"

⁵ RIM contracts do not offer the same 18-month computation limit for penalties, which are computed nearer to the end of construction to enhance the MTA's ability to collect such assessments.

⁶ On September 10, 2010, shortly before the release of this report, the agency began to supply some of the documentation to the 16 contracts. The OIG will continue to monitor RIM's processing of these contracts until all documentation has been provided.

CSIP classifications represented record keeping deficiencies that undermine the ability of oversight agencies such as the OIG to verify the appropriateness of CSIP incentive computations and increase the risk that incorrect reward/penalty practices will not be detected.

3. Limited Scrutiny of CSIP Computations

According to RIM procedures, CSIP reward determinations must first be approved in writing by both RIM's Director and Deputy Director for Risk Control and Reporting before payments can be issued to MTA contractors. Our review finds, however, that the CSIP authorization process may not have required sufficient scrutiny of the computations performed by the CSIP Manager. In Case Study #3 of this report, we noted that the CSIP Manager incorrectly determined that the contractor was owed a \$64,638 reward, or \$23,085 more than the contractor was actually entitled to receive. Although RIM's Director and Deputy Director were responsible for reviewing this CSIP computation, they failed to detect the error and authorized the reward. We further note that RIM procedures do not require any senior management review and formal approval for penalty assessments or when contractors are judged not subject to any penalties.

We believe that RIM's current incentive approval process lacks the necessary checks and balances required to verify that all CSIP determinations are reasonable, accurate, and well supported.

RECOMMENDATIONS

To help eliminate improper incentives to future contractors, we offer the following recommendations:

1. RIM should re-examine its existing CSIP guidelines for assessing contractor eligibility to determine if new procedures can be developed to prevent the types of incentive Overpayments and Undercharges identified in this report.

MTA Response:

In light of the findings identified in this report, RIM officials have devised a procedural modification that they believe will mitigate the risks of utilizing interim ACL values within 18 months of the contract closeouts to compute contractor safety rewards. In this regard, the officials stated that:

RIM is planning to conduct claim reviews of open claims and, where appropriate, seek to apply a loss development factor to the loss estimate before the reward or penalty calculations are made. In circumstances where a loss development factor is applied, additional portions of an award, if any, would be made only after all claims for that contractor are closed and the CSIP Manager has recalculated the award to determine if the contractor is eligible to receive a greater award based on the final loss data.

2. If RIM cannot more accurately assess contractor eligibility for safety incentives, the MTA should discontinue the CSIP program for future contracts and initiate negotiations with contractors still covered by CSIP to remove or at least reduce the Authority's contractual incentive obligations.

MTA Response:

RIM officials stated that after examining the results of the procedural modifications noted above, they would assess whether such changes had reduced the risk of computing contractor incentives when utilizing interim ACL values within 18 months of the contracts' closeout. Based on this review, the MTA would ultimately determine whether the CSIP program warrants future extension. They also noted that, pending the results of this review, CSIP program provisions have been removed for contracts yet to be awarded.

3. To further limit the possibility of CSIP Overpayments, RIM should institute the following internal controls:
 - Senior RIM officials must verify documentation for construction cost and ACL data employed for all CSIP computations including those determined "Not Qualified" for rewards or penalties;
 - RIM must retain documentation to support all CSIP incentive computations; and

- Final CSIP incentive reward payments should be issued no earlier than the end of the 18-month consideration period allowed after the close of contracts.

MTA Response:

RIM officials agreed to implement the internal controls identified in this recommendation.

SECTION II: INADEQUATE CONTROLS OVER PAYMENTS TO SAFETY MONITORS

As part of the MTA's overall strategy for reducing the frequency of work-related accidents, four private safety management firms subcontracted by PTI (MTA's insurance broker) regularly dispatch specialized personnel known as safety monitors to evaluate safety conditions at the Authority's construction sites. The monitors' duties include routine inspections as well as periodic evaluations of the contractors' Safe Work Plans, which outline specific strategies to address hazards that may arise at each construction phase.

At the end of each month, the management firms submit invoices to PTI for the services of the safety monitors at an hourly rate of \$75. While PTI pays the safety management firms on a monthly basis, it issues an invoice to RIM's Deputy Director for OCIP Management for reimbursement once a quarter.

OIG found, however, that while PTI required supporting documentation to justify work, neither PTI nor RIM had a process in place to routinely audit these materials for billing irregularities. While the need for such routine is self-evident, two irregularities that fortuitously were discovered underscore that point.

PTI discovered that a safety monitor had used duplicate narratives to improperly support his inspection reports in May 2008; soon after this discovery, the safety management firm discharged the monitor. In a separate subsequent incident, a monitor who submitted questionable overtime charges was later terminated; the bill was ultimately paid at the standard rate. Despite these incidents, the billing review procedures remained lax. Making the system even more vulnerable, RIM did not utilize any spending caps or guidelines to flag unusual spending patterns.

In light of these vulnerabilities, OIG reviewed all bills submitted to PTI during the last quarter of 2008 (totaling \$208,091), examined the corresponding safety inspection reports and other supporting documents supplied to PTI and met with RIM and PTI representatives to discuss the invoices. In total, we identified 116 instances of missing inspection reports, duplicate report components and computational errors related to the subcontractors invoices submitted to PTI.⁷ While either or both RIM and PTI should have discovered these discrepancies, neither did.

When we submitted our findings to the Deputy Director for OCIP Management, he stated that he relied on PTI to perform quality control functions on its subcontractors' bills. However, PTI officials stated that they were unaware of their responsibility to verify their subcontractor billings, and had merely checked the math in the invoiced payment requests. Additionally, it appears that when PTI submitted invoices for payment, the CSIP Manager marked it "OK to pay" with little to no review.

⁷ Following a detailed review of the discrepancies, RIM and PTI provided missing substantiation and clarified inaccuracies to establish that fortunately only a nominal over-billing for inspection services had actually occurred during this period.

RECOMMENDATIONS

4. RIM and its insurance broker must more closely scrutinize safety monitor inspection charges submitted to the MTA for reimbursement, and certify that such charges are properly documented and accurate.

MTA Response:

RIM officials agreed with this recommendation and instituted a number of procedural enhancements to verify the accuracy of safety inspection invoices. In this regard, RIM required PTI to institute a new protocol for reviewing its subcontractor invoices to ensure that adequate support documentation is obtained and to employ a new electronic billing form with a number of automatic tally fields to reduce its computational errors. RIM also enhanced its own internal review process to ensure bills are thoroughly vetted before PTI invoices can be approved for payment.

CONCLUSION

As the owner of properties that frequently undergo lengthy and dangerous construction and rehabilitation, the MTA has a significant obligation to strictly enforce contractual safety standards to protect its own employees and other workers, as well as the general public. In addition to harm resulting from personal injuries and property damage caused by construction site accidents, failure to meet its obligation can have tremendous economic consequences for the MTA which, as a self-insured OCIP provider, is largely responsible for the payment of accident claims arising from its capital projects.

RIM, as the MTA's centralized insurance authority, is in the vanguard of the Authority's efforts to reduce accidents at agency construction sites. By regularly dispatching technically trained and independent inspectors to all on-going OCIP work sites, RIM plays a pivotal role in ensuring that the approved safety plans for construction are being adhered to and that safety violations, when discovered, are quickly corrected. While acknowledging the importance of these safety inspections, our review found that RIM lacked adequate procedures to ensure the integrity of invoices submitted by outside contractors who provide these services. RIM has since recognized these deficiencies and implemented several improvements in line with the recommendations in this report.

More significantly, however, our review also identified problems in RIM's implementation of its Contractor Safety Incentive Program, which theoretically rewards contractors who generate the lowest accident claim costs and penalizes those whose claims significantly exceed MTA expectations. While employing a "carrot-and-stick" incentive approach was certainly well intentioned when RIM originally initiated the program more than 10 years ago, the effectiveness of CSIP has been hobbled by the most basic of design flaws – the Authority cannot reliably estimate the full cost of accident claims when judging contractors' eligibility for incentives. Indeed, accident claim costs can – and do – increase substantially in the years following the close of construction.

By relying on accident claim estimates normally made within six months of the close of the contract, RIM consistently underestimates the true cost of accidents and miscalculates the rewards owed to and penalties due from construction contractors. These cost underestimations resulted in more than \$665,000 in Overpayments and Undercharges to NYC Transit contractors during our audit period.

Our review also faulted RIM's monitoring and oversight of the CSIP process, which failed to detect several significant clerical errors made during the CSIP computation process. In one such case, a contractor whose accident claim costs should have resulted in a \$41,553 reward instead received an incentive check for \$64,638. This \$23,085 Overpayment resulted after the CSIP Manager made a significant math error in the computations – an error that was not detected by top RIM managers.

We find that underestimated accident claims and computation errors added more than \$722,000 in unnecessary incentive costs to the CSIP program and that almost one of every three incentive

dollars awarded during our audit period represented either an Overpayment or Undercharge of the contractors involved. For two reasons, though, our findings are likely understating CSIP losses: first, our audit covers only the four-year period 2000-2004; and second, RIM could not provide any documentation to support their incentive computations for 16 additional contracts in that period worth \$129.3 million, which we sought to review.

Recognizing the importance of improving safety at MTA construction sites, we repeatedly sought input from RIM officials in identifying possible changes that could improve the incentive program. While fully aware that CSIP's design inherently increased the risk that some contractors would be over-rewarded or under-penalized, RIM officials expressed confidence that the program had nevertheless produced an overall reduction in the MTA's accident claim costs. The officials' claims were unsubstantiated, however, as RIM had never tracked incentive losses resulting from underestimated accident claims nor formally studied whether overall accident costs had actually declined as a result of CSIP.

While the adoption of this report's recommendations can, if properly implemented, lower the error rate in incentive computations, we believe that RIM's current methodology for computing CSIP incentives is inherently error prone and will always result in significant Overpayments and Undercharges to outside contractors. As such, we have recommended that the RIM review its procedures to determine if the CSIP methodology can be modified to address our concerns. If the incentive computation process cannot be significantly altered, however, we advise the Authority to discontinue CSIP for capital contracts. We also recommend that the MTA should explore the option of re-negotiating the \$2 billion in current NYC Transit contracts still covered by the CSIP program to eliminate or reduce the Authority's future incentive obligations.

APPENDIX A: OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives in reviewing CSIP were to determine whether the safety incentives awarded to MTA contractors:

- complied with relevant RIM guidelines;
- were adequately supported by all appropriate contract cost and accident claim data required for incentive computations; and
- were subject to sufficient internal controls to ensure the fairness and accuracy of such safety awards.

To accomplish our objectives, we reviewed all applicable MTA guidelines, policies and procedures, regarding CSIP and interviewed RIM responsible for processing, monitoring CSIP incentive computations.

The audit requested supporting documentation for all NYC Transit capital contracts that were awarded between 2000 and 2004 and considered for CSIP incentive awards by March 2009. In total, we identified 73 contracts with a total value of \$1.88 billion that fit the parameters of our audit scope. Despite repeated requests for this information, RIM was only able to supply CSIP files for 57 of these contracts worth \$1.75 billion. The remaining 16 contracts worth \$129.27 million were not provided and, therefore not included in our review.

To ascertain the validity of the CSIP computations, we examined the RIM computation matrices created for each sampled contract and sought to verify the data included in the computations including, but not limited to, the total cost of construction for the contracts involved as well as the Accident Claim Loss (ACL) value at the time the CSIP computation was performed.

To determine if the ACL values represented a consistent and reliable indicator of contractor safety performance, we compared the ACL values employed at the time of the CSIP computation with the ACL data effective at March 2009. All ACL values were supplied by PTI.

Our objective for evaluating the safety monitor program was to verify if the amount charged for such services by PTI, the MTA's insurance broker, could be supported by documentation of the actual inspections that were performed by the four subcontracted safety management firms.

We examined the bills submitted by the subcontractors during the last quarter of 2008, representing 2,775 hours of billing documentation totaling \$208,091. We also examined approximately 800 Daily Survey Reports (DSR) which contain identifying information and photos unique to each location and time of inspection.

Our tests of these records included the following:

- Each DSR was reviewed and spot comparisons were performed to rule out duplication.
- Invoiced hours were compared against corresponding support documents (i.e., DSR, meeting sign-in sheet); and
- Safety monitor workhours on the DSR's were tallied and compared to the subcontractor invoices.