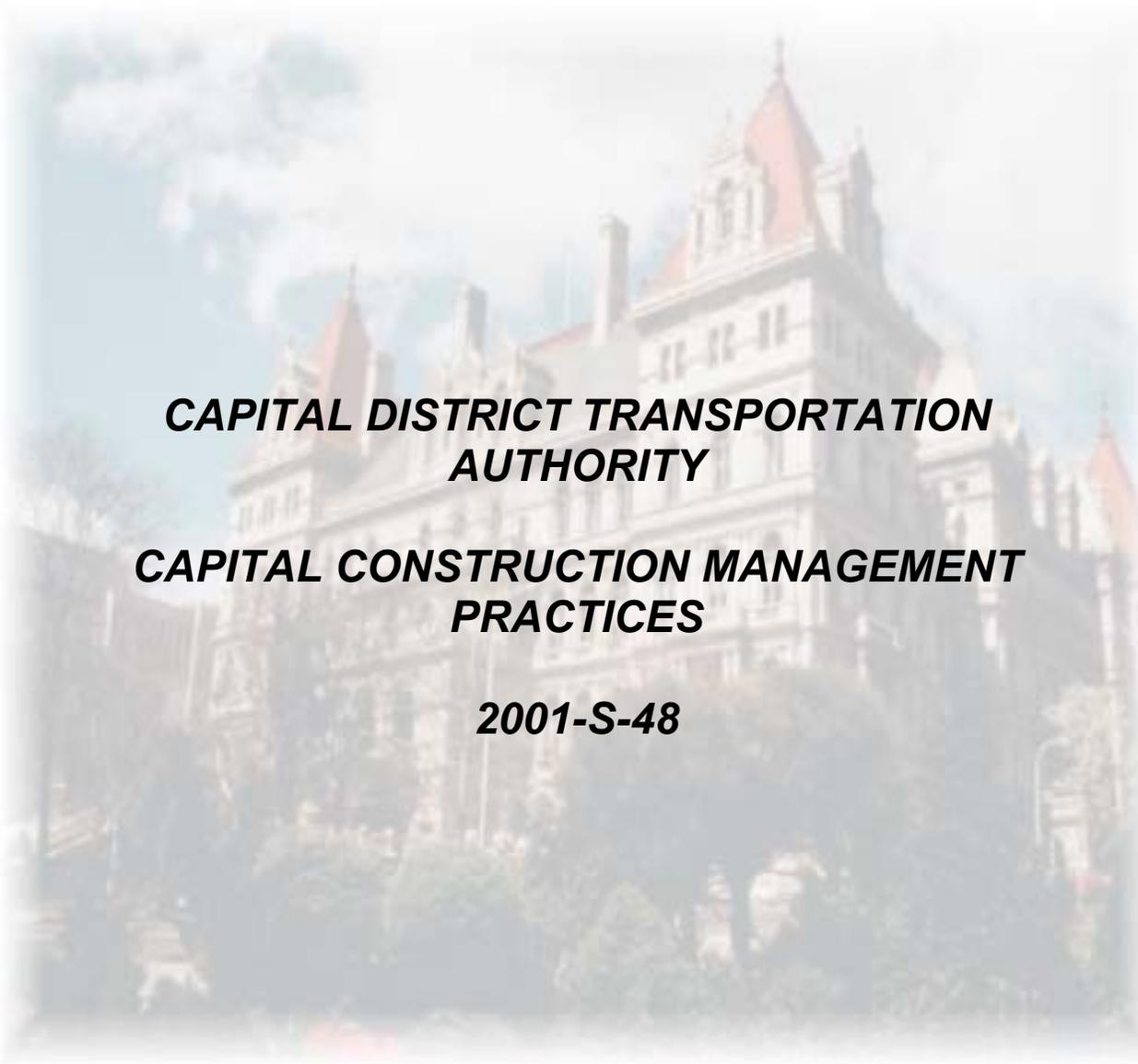


NEW YORK STATE OFFICE OF THE STATE COMPTROLLER

**H. Carl McCall
STATE COMPTROLLER**



**CAPITAL DISTRICT TRANSPORTATION
AUTHORITY**

**CAPITAL CONSTRUCTION MANAGEMENT
PRACTICES**

2001-S-48

**DIVISION OF MANAGEMENT AUDIT AND
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H. Carl McCall
STATE COMPTROLLER

Report 2001-S-48

Mr. David Stackrow
Chairman
Capital District Transportation Authority
110 Watervliet Avenue
Albany, NY 12206

Dear Mr. Stackrow:

The following is our report on the Capital District Transportation Authority's capital construction management practices.

This audit was performed pursuant to the State Comptroller's authority as set forth in Article X, Section 5 of the State Constitution. Major contributors to this report are listed in Appendix A.

Office of the State Comptroller
Division of Management Audit
and State Financial Services

August 15, 2002

Division of Management Audit and State Financial Services

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EXECUTIVE SUMMARY

CAPITAL DISTRICT TRANSPORTATION AUTHORITY CAPITAL CONSTRUCTION MANAGEMENT PRACTICES

SCOPE OF AUDIT

The Capital District Transportation Authority (CDTA) is a public benefit organization formed by the Legislature in 1970 to provide for the continuance, development and improvement of transportation in the Capital District. CDTA is overseen by a nine-member Board of Directors (Board) and has as its primary operating responsibility the management of the region's bus services, which serve a four-county area. CDTA has expanded its services to include construction project management, and is the owner of seven projects that are either completed or currently under construction. Six projects are bus shelters or park and ride facilities, and the seventh project is the new Rensselaer Rail Station (Rail Station), which is expected to replace the existing Amtrak facility. The Rail Station was designed to allow easier passenger access to trains and to feature retail space, a restaurant, office space and conference areas.

In January 1997, CDTA hired an architect and initiated the Rail Station project as a traditional construction project. Later that year, CDTA switched to a fast track construction method and hired a Construction Manager (CM) to draft Requests for Proposals (RFP) and monitor contract execution. CDTA approved contracts and paid bills. Although the Rail Station was originally due to open in July 2000 and most recently was scheduled to open in June 2002, construction was still ongoing in July 2002. The facility's estimated cost has risen from \$34 million to more than \$53 million, however, CDTA still does not have a lease agreement with Amtrak.

Our audit addressed the following questions about CDTA's capital construction planning and management practices for the period September 1, 1999 through December 31, 2001:

- Does CDTA have the skills, business systems and other resources needed to carry out large-scale construction projects?
- Does CDTA have a comprehensive marketing plan for the Rail Station?

AUDIT OBSERVATIONS AND CONCLUSIONS

We concluded that CDTA's lack of relevant experience in managing large-scale construction projects, its cash flow problems and its inadequate business systems contributed to the Rail Station project being more than two years late and more than \$19 million over budget. We found that, despite a scheduled June 2002 opening date, CDTA does not have a marketing plan for the new Rail Station and had only one signed tenant as of March 2002.

In fast track construction, a project is designed and built in sequential phases, so that needed changes can be incorporated into future designs. However, fast track demands integrated planning and close cooperation among parties. As CDTA did not effectively coordinate project management, the project generated 358 change orders and 431 information requests, all of which delayed progress. CDTA also experienced cash flow problems, due, in part, to cost overruns which caused it to delay payments to contractors, borrow money to cover project expenses, and omit or scale back Rail Station design elements. When we compared the August 1997 cost estimate of \$34 million to the November 2001 cost estimate of \$53.1 million, we found that CDTA had not identified all of the components of the initial estimated cost. Further, a summary CDTA provided to detail the \$19.1 million difference in cost did not include documentation to support the various cost increases, or give any explanation for \$1.74 million of the \$19.1 million total. We also found that CDTA does not track budgeted to actual cost because it uses an accounting system that cannot accurately capture or comprehensively report cost for a project with numerous funding sources. (CDTA replied to our draft report that other factors such as the "complexity of scope," and "resourcefulness of the contractor" will impact the number of change orders and information requests.) (See pp. 7-15)

We also found that the Board did not always pre-approve transactions above certain cost thresholds, as required by CDTA Guidelines. Further, we found CDTA could not document the extent of project information and detail provided to the Board so that Board members could decide how to proceed with the Rail Station project. We recommend that CDTA establish a system to track transactions requiring Board approval and that it develop standardized planning forms to provide for the Board's thorough examination of a project's feasibility before approving it. (See pp. 15-19)

At the time of our audit work, the Rail Station was scheduled to open in June 2002, two years behind schedule. However, as of March 2002, CDTA did not have a marketing plan, had not negotiated a lease with Amtrak and had a signed lease with only one Rail Station tenant. Thus, we questioned whether CDTA could have opened this facility in June 2002, or if it can maximize revenue when it does open. We recommend CDTA develop a marketing plan and we encourage CDTA to expedite its efforts to lease Rail Station space. (CDTA officials replied to our draft that they have signed three additional tenants

[restaurant, news and gift shop, and an ATM vendor] and are still negotiating with Amtrak.) (See pp. 19-22)

COMMENTS OF CDTA OFFICIALS

A draft copy of this report was provided to CDTA officials for their review and comment. Their comments have been considered in preparing this final report, and are included as Appendix B.

CDTA officials agreed with our recommendations and indicated actions taken or planned to improve their capital construction management practices.

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Summary of Rail Station Cost Increases Per CDTA as of May 2001	
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INTRODUCTION

Background

The Capital District Transportation Authority (CDTA) is a public benefit organization formed by an act of the New York State Legislature in 1970. Its enabling legislation allows for the continuance, further development and improvement of transportation (by railroad, omnibus, marine and air) and other related services within the Capital District, and its operating mission is to transport customers safely and reliably at a reasonable cost. The CDTA has a nine-member Board of Directors (Board) who are appointed by the Governor and confirmed by the State Senate, and comprised of three representatives from Albany County and two each from Rensselaer, Saratoga and Schenectady Counties.

CDTA's primary operating responsibility is the management of the region's bus services. Its bus fleet of 226 vehicles serves a four-county area that is home to 750,000 people and encompasses about 2,300 square miles. CDTA provides a range of service, including local bus service, limited stop-express runs, and park and ride commuter service from over a dozen locations. In addition to regular route service, CDTA provides rural bus service to a number of communities in the service area and para-transit service for people with disabilities. This service, which is called STAR (Special Transit Available by Request), is a demand-based curb-to-curb operation. CDTA employs about 500 people who perform a variety of functions to support CDTA's commitment to customers, and had a \$35 million operating budget for fiscal year 2001-02.

CDTA expanded its services to include construction project management (most of which is transit-related), and has a staff of seven assigned to project planning and grants administration. From February 1995 through October 2001, CDTA planned or worked on at least 12 projects. Three of these projects (Route 5 Signal Project, Warren County Scenic Train and Saratoga Train Station) are in the pre-construction phase, and CDTA has the lead role in planning and construction. CDTA also had a lead role in planning two other capital construction projects (Commuter Rail, Albany-Schenectady Light Rail) that were dropped or postponed indefinitely. CDTA is also the owner of

the remaining seven projects, which are either completed or currently under construction, as shown in *Table 1*. Six of these projects are relatively small-scale projects (four bus shelters and two park & rides) for which CDTA served as construction manager. According to CDTA records, these six projects all took more time than budgeted to complete, but involved relatively few change orders. Change orders are written agreements by the owner and contractor to alter the originally agreed upon contract requirements, and can either increase or reduce the contract time or the contract amount.

A seventh project, the new Rensselaer Rail Station (Rail Station) is still under construction but nearing completion. The Rail Station is much larger and more complex than the six projects CDTA has already completed because it involved the movement of train tracks as well as the construction of the Rail Station and a parking garage. Track movement called for coordination with Amtrak because Amtrak requires track work to be done by its own staff.

**TABLE 1: CDTA Capital Construction Projects
1995 – 2001**

Project	Reported Final Cost	Change Orders		Budget Days	Days Over Budget
		Number	Cost		
Rensselaer Rail Station*	\$53,140,000	358	\$2,896,423	450	700
Exit 8 Park & Ride	1,172,837	19	9,984	120	30
Schodack Park & Ride	465,037	1	8,102	60	30
Washington & Lark Shelter	296,801	1	(34,903)	120	90
Liberty Park Project	263,108	2	13,595	90	90
Crossgates Shelter	203,535	7	16,098	90	60
Colonie Center Shelter	142,195	1	2,701	90	Not available

* *Since the Rail Station is an ongoing project, the total estimated project cost, the number of change orders and the associated cost and the number of days over budget are all subject to change.*

The concept for a new rail station to serve the Capital District was initiated in 1993. According to the development plan, the new station was intended to be a catalyst for economic development for the City of Rensselaer and Rensselaer County and to address the deficiencies of the existing station, which is owned by Amtrak. Among the station deficiencies identified on CDTA’s project justification were chronic parking problems, a lack of protection from inclement weather, and the need for passengers to cross tracks to board trains. In 1995, the project moved from the conceptual to the development phase.

At about this time, rail ridership volume had begun to grow steadily, according to the New York State Department of

Transportation (DOT). In this context, ridership is defined as the number of passengers in the whole Empire Corridor within New York State, which includes track between New York City, Rensselaer and Buffalo/Niagara Falls. Prior to 1995, the growth in Amtrak ridership was relatively flat. However, between 1995 and 2000 ridership increased from about 1.07 million to nearly 1.3 million passengers (excluding ridership to and from Canada), and daily trains serving Rensselaer increased to 14 trains per weekday west of Rensselaer and 28 trains per weekday south of Rensselaer to New York City by May 2001. Based on the events of September 11, 2001, ridership dipped by two percent in 2001 due to tighter security and cross border delays. DOT projects that ridership will increase to about 3 million annually in the Empire Corridor with up to 40 trains per day by the end of the decade.

The Rail Station building, at 80,000 square feet, is designed to accommodate these additional rail passengers. (In response to our draft report, CDTA officials indicate that a more accurate square footage is 72,000.) By comparison, the existing station is a 23,000 square foot facility. The new facility will include passenger facilities such as a waiting area, passenger hall, and ticketing area, retail space including a restaurant, newsstand and gift shop and a business center and meeting rooms for public use. CDTA officials indicated that they plan to lease space to Amtrak and other major retail tenants. The project also involved moving and upgrading train tracks to allow for easier passenger access and initially proposed adding tracks to provide more service capacity.

In January 1997, CDTA hired an architect for the Rail Station project and began to draft Request for Proposals (RFP) for various aspects of the work (e.g., electrical, plumbing, carpentry). When CDTA hired a contractor to serve as Construction Manager (CM) in August 1997, the CM took over the development of RFPs. The CM is responsible for scoping the project into sections to be bid, for reviewing and commenting on the specifications for the individual contracts and monitoring the execution of individual contracts. The CM employs a project manager, a project engineer and a project supervisor to perform these duties. As the Rail Station owner, CDTA's role includes approving project contracts, administering grants for Rail Station construction, and paying bills based on the CM's approval of work completed.

The initial scheduled completion date was July 2000, but CDTA anticipated opening the Rail Station in June 2002. The Rail Station's parking garage opened on October 22, 2001. The initial August 1997 cost estimate for the project was \$34 million. By May 1998, CDTA notified the Board that the revised cost estimate was \$41.1 million. CDTA did not provide a breakdown of the revised estimate by project category. The Board minutes for October 14, 1998 show that the Board authorized commencement of work on the project, but a cost estimate was not mentioned in the minutes. The cost estimate was again revised to \$43 million at the time of groundbreaking on June 2, 1999. The current estimate at the end of our fieldwork in May 2002 was \$53.1 million. CDTA records show that, as of March 31, 2002, it had spent about \$43.2 million on the Rail Station project. According to CDTA officials, the remaining \$10 million consists of \$7.5 million worth of contracts for current work such as the platforms and interior finishes, \$1.3 million of contracts yet to be let, and about \$1.5 million in retainage.

Audit Scope, Objectives and Methodology

We audited CDTA's construction planning and management practices for the period September 1, 1999 through December 31, 2001. The objectives of our performance audit were to determine whether CDTA has the people, skills and business processes to undertake large-scale construction projects, such as the construction of the Rail Station, and whether CDTA has a comprehensive plan for marketing space for lease in the Rail Station.

To accomplish our objectives, we interviewed CDTA officials, reviewed laws, policies and procedures, and analyzed CDTA's records and reports. We also interviewed officials from DOT and the Capital District Transportation Committee to obtain ridership and train statistics and to gain an understanding of their roles in project planning, including the construction of the Rail Station. We also interviewed officials from the Metropolitan Transportation Authority, the Port Authority of New York/New Jersey and the Dormitory Authority of the State of New York (Dormitory Authority) to gather information about certain aspects of how they manage capital construction projects and how they lease space in their facilities.

We conducted our audit in accordance with generally accepted government auditing standards. Such standards require that we

plan and perform our audit to adequately assess those CDTA operations that are within our audit scope. Further, these standards require that we understand CDTA's internal control structure and its compliance with those laws, rules and regulations that are relevant to the operations included in our audit scope. An audit includes examining, on a test basis, evidence supporting transactions recorded in the accounting and operating records and applying such other auditing procedures as we consider necessary in the circumstances. An audit also includes assessing the estimates, judgments, and decisions made by management. We believe our audit provides a reasonable basis for our findings, conclusions and recommendations.

As is our practice, we notify agency officials at the outset of each audit that we will be requesting a representation letter in which agency management provides assurances, to the best of their knowledge, concerning the relevance, accuracy and competence of the evidence provided to the auditors during the course of the audit. The representation letter is intended to confirm oral representations made to the auditors and to reduce the likelihood of misunderstandings. In the representation letter, agency officials assert that, to the best of their knowledge, all relevant financial and programmatic records and related data have been provided to the auditors. Agency officials further affirm that either the agency has complied with all laws, rules, and regulations applicable to its operations that would have a significant effect on the operating practices being audited, or that any exceptions have been disclosed to the auditors.

CDTA officials provided us with a representation letter. However, we requested the representation letter state that CDTA made available to us all records relating to the scope of our audit, with the exception of seven records that were not provided during the audit. CDTA informed us they were going to provide some of these documents and requested that we remove reference to them in the representation letter. We advised them that upon receipt of the documents we would reflect this in our report. Although, CDTA officials removed three records from the representation letter, they did not provide two of the records (critical path and construction schedule). As a result, we lack assurance from CDTA officials that all relevant information was provided to us during this audit. We consider this omission from the representation letter to be a scope limitation on our audit. Therefore, readers of this report should

consider the potential effect of this scope limitation on the findings and conclusions presented in this report.

We use a risk-based approach when selecting activities to be audited. This approach focuses our efforts on those operations identified through our preliminary survey as having the greatest probability for needing improvement. Consequently, by design, finite audit resources are used to identify where and how improvements can be made. Thus, we devote little effort to reviewing operations that may be relatively efficient or effective. As a result, our audit reports are prepared on an “exception basis.” This report, therefore, highlights those areas needing improvement.

Response of Capital District Transportation Authority Officials

A draft copy of this report was provided to CDTA officials for their review and comment. Their comments have been considered in preparing this final report, and are included as Appendix B.

CDTA officials agreed with our recommendations and indicated actions taken or planned to improve their construction management practices. They also provided additional information about their capital projects program, which was not available during our fieldwork, and, in some cases, contradicts information provided to the auditors. For example, we were told that certain capital projects were cancelled due to insufficient funds; however, the response indicates this did not happen. In addition to Appendix B, we also incorporated certain comments on events that occurred since our fieldwork or to clarify certain events, where appropriate.

Within 90 days after final release of this report, as required by Section 170 of the Executive Law, the Chairman of the Capital District Transportation Authority Board of Directors shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons therefor.

CAPITAL CONSTRUCTION MANAGEMENT PRACTICES

Major capital construction projects must be effectively coordinated and managed and adequately funded for them to be completed on time, within budget and scope of work. However, we found that the Rail Station project is late and significantly more expensive than initially estimated because CDTA had problems coordinating, funding and managing this complex capital construction project. For example, in undertaking construction of the Rail Station, CDTA decided on a fast track construction method without having experience with this method and the integrated planning and close cooperation among the project's parties demanded for fast track projects. CDTA also encountered cash flow problems later in the project, resulting in: delayed payments to contractors, placing bids on hold, borrowing money to pay project expenses, and canceling non-related projects for lack of funds. The cash flow problems had various causes, including the use of fast track, which made CDTA draw down funds to pay contractors faster than it could obtain reimbursement of the funds; the project's upgrades and change orders, which increased cost; and a slow reimbursement process that left CDTA short of capital at times. Further, CDTA efforts to manage and monitor project cost and progress were hampered by its initial cost estimates that were too general, and an accounting system that does not track and report comprehensively on project cost. We also found that CDTA does not provide for timely Board approval of cost above specified thresholds, as required by CDTA guidelines, or have a standardized methodology to provide the Board with a full range of information about the demands of a project before the project is approved. The overall impact of CDTA's lack of relevant experience, sufficient capital and adequate accounting systems is a project that is almost two years late and \$19.1 million over the initial project estimate, and \$10 million over the estimate at groundbreaking.

As the owner of the new Rail Station, CDTA must also identify potential tenants for its retail space and develop a plan to operate the facility. However, in March 2002, three months before the scheduled Rail Station opening, CDTA had no

marketing plan in place and had only one approved lease with a tenant. Thus, it was questionable whether CDTA could have the Rail Station fully operational by June 2002, or if it can maximize revenue when it does open the facility. We discuss the details of CDTA's management of the Rail Station project in the following sections of this report.

Project Coordination

According to Dormitory Authority and other construction professionals we contacted, the traditional method of construction in the public sector is to prepare complete designs for a project, solicit bids, and then build the structure. By contrast, the "fast track" method of construction segments the project into phases that are designed and built in sequence. According to such professionals, an owner can save time by using fast track because a full set of designs is not needed up front. Work can progress on one phase while the next phase is drawn up. Further, using fast track should result in fewer total change orders because changes can be incorporated in the design of future phases of the project. Construction professionals told us the main potential disadvantage of fast track is that cost estimates may not be fully known without complete designs.

After initially planning to use the traditional method of construction for the Rail Station, and hiring an architect to produce a full set of designs, CDTA hired a CM and decided to use the fast track method for the project. However, CDTA did not effectively coordinate the use of the fast track approach on the Rail Station project. Fast track demands close cooperation among all the parties involved in the project (the architect, the CM and CDTA) and fully integrated planning to produce sequential designs on schedule and to complete construction phases on time with minimal change orders. We conclude that CDTA, whose previous construction projects were bus shelters and park and ride facilities, lacked the experience needed to successfully use fast track on such a complex, large-scale project. As a result, CDTA did not reap the potential benefits from using fast track; on the contrary, the project is taking much longer than originally anticipated and the project's estimated cost has increased significantly.

One of the goals of fast track is to minimize the number of change orders as they usually result in delays, which can impact

the project's schedule and cost. We reviewed total project change orders as of September 27, 2001, and found that the Rail Station had generated 358 change orders. While we cannot speculate how many change orders would have resulted had CDTA used the traditional construction method, we can conclude that these 358 change orders required time, and often additional funds, to resolve. The Rail Station also generated 431 requests for information (RFI). RFI are questions submitted by contractors asking for details to understand the design. The combination of numerous change orders and RFI lead to a higher workload for the architect, as well as for CM and CDTA officials, all of whom had to devote more time to the project. Therefore, change orders and RFI delayed the progress of both design and construction work and contributed to the increased cost and delays in project completion. In addition, contractors have claims totaling about \$1.4 million pending against CDTA for alleged delays they encountered.

The generation of change orders and RFI was due in part to the fact that incomplete designs were put out to bid. According to CM officials, fast track construction progress outpaced the architect's production of designs. The project architect indicated that the delay in design led all parties to agree to bid out incomplete designs, as the cost of doing so appeared to be lower than the cost of waiting for complete designs. To determine the degree to which designs were on time we wanted to review the schedule of when designs were due, per the architect's contract. However, we found that the schedule was developed prior to switching the project to the fast track method. CDTA and CM officials told us that the design schedule was not followed after the switch to fast track. We asked CDTA officials if they had coordinated project efforts by revising this schedule, or by developing the project's critical path. The critical path is the set of activities that must be completed, and completed on time, so that other subsequent activities can be done and the entire project can be finished on time. The critical path represents the minimum time needed to complete the project. However, CDTA did not provide us with a revised design schedule, or with a critical path for the project.

While some delays and problems are inevitable on any large-scale construction project, we conclude that delays and coordination problems associated with the Rail Station project are attributable, in part, to CDTA's lack of experience with large-scale projects, in general, and with the fast track method in

particular. Some of the CDTA personnel associated with the Rail Station had 20 years of experience in the rail industry, but they did not have prior experience with fast track projects. Thus, CDTA officials may not have given sufficient consideration to the fact that design turnaround is quicker when fast track (as opposed to traditional construction) is used, since fast track is intended to shorten construction time. Further, CDTA decided to use fast track after having hired an architect, but had not considered the architect's prior experience with fast track projects before contracting with the firm. The Rail Station was initiated using the traditional method; therefore neither the request for qualifications nor the contracts for the architect and the CM noted the fast track nature of the project. The CM indicated it had prior experience with one large fast track project. CDTA officials said it was necessary to fast track the Rail Station project to participate in \$7.5 million of available Federal funding that would be lost if construction were not initiated promptly. Although CDTA showed us evidence that it had to obligate the funds for the project to obtain the Federal monies, it did not provide documentation to show that the project had to be fast tracked to obligate the funds. Therefore, CDTA may have been able to use the traditional approach and still utilize the available Federal funds.

Project Cost

The cost of major capital construction projects, including the cost of changes and upgrades, should be adequately documented and effectively managed to maintain control over total project cost and to pay bills when due. However, we found that CDTA did not maintain adequate documentation of the change orders, upgrades and revisions that make up most of the estimated \$19.1 million of increased cost. We also found that CDTA experienced cash flow problems that caused it to put bids on hold, delay payments to contractors, delay construction work, borrow money to cover project expenses, delete elements in the original project design and cancel other projects. The causes of these cost control and cash flow problems include: not identifying and documenting all initial cost, including non-construction cost; not anticipating the impact of a slow reimbursement process; and using an accounting system that did not adequately track project cost.

Using CDTA data, we compared the original (August 1997) and revised (November 2001) cost estimates for the Rail Station, shown in *Table 2*. We asked CDTA officials for documentation

to support the associated increases or decreases in estimated cost. CDTA provided us with summary data that described the reasons for increases and decreases in various project categories (see Exhibit A). However, CDTA could not provide support for the initial estimated cost, and how it was derived, or documentation to support increases in estimated cost. For example, the August 1997 estimate lists the parking garage cost at \$8 million, but CDTA did not have records that broke down this cost into various expenses. Likewise, there was no documentation to explain the reasons why the cost of the parking garage increased by \$3.52 million, as reported in the November 2001 estimate. Further, when we totaled all the items in CDTA's summary, \$1.74 million of the additional estimated expense between August 1997 and November 2001 (9 percent of the overall increase in the estimated cost) was unaccounted for.

Category	Cost Estimates			Difference	
	August 1997	November 2001	Cost Increase (Decrease)	CDTA's Explanation of Cost Increases	Not Explained
Station and Tenant Space (Includes Passarelle ¹)	\$11.5	\$20.56	\$9.06	Additions and upgrades - \$2.82m Site work - \$1.59m Walkways and platforms - \$2.18m Change Orders are \$1.58m	\$.89
Bridge	3	4.7	1.7	Upgrades - \$.6m Change Orders - \$.34 m	\$.77
Parking Garage	8	11.52	3.52	Additions and upgrades - \$2.9m Change Orders - \$.54 m	\$.08
Non-Construction (Architect & Engineering Fees, Admin. & Land)	3	13.31	10.31	Sitework and Land Acquisition - \$4.76m Design and construction manager - \$8.5m	0
Trackwork	8.5	2.4	(6.1)	4 th Track on hold, higher cost	0
Contingency	0	.65	.65		0
Total	\$34.0	\$53.14	\$19.14		\$1.74

¹ A walkway that allows passengers trackside access.

From the limited information available it appears that some of the increase in the project's estimated cost was due to incomplete or poor initial estimates based on the general nature of the initial design. For example, non-construction costs (architect and engineering fees, administration and land) were originally estimated at only \$3 million in August 1997. By the time the November 2001 estimate was completed, this category's cost was estimated at about \$13 million - an increase of about \$10 million. In the most recent estimate, design and construction manager costs alone (\$8.5 million) exceeded the original estimate for the entire cost category. However, as CDTA records did not allocate the initial \$3 million estimate by component (such as land), it is not possible to determine how

much the cost estimates for each item changed as the project progressed.

CDTA officials advised that such documentation was not readily available and would be too time consuming for the CM to compile at this time in the project. CDTA officials also told us that the summary of cost increases they provided was intended to explain cost differences between the \$43 million estimate at the time of groundbreaking and the estimate of \$53.1 million. In addition, the August 1997 estimate of \$34 million was made nearly two years prior to groundbreaking and was used primarily as a construction cost estimate. Officials acknowledged that the August 1997 estimate had relatively little money for soft cost, such as construction management, land acquisition and design fees, and did not allow for price inflation.

Regardless of when and why project cost estimates are done, CDTA should maintain records that show the derivation of whatever those estimates are for each project category and include documentation to justify the estimates. CDTA should also identify the components of each project category such as non-construction, so it can analyze and track changes (increases and decreases) throughout the project. Furthermore, CDTA should maintain complete documentation to support cost increases or decreases from its estimated project costs.

As the project owner, CDTA also needs sufficient capital to pay contractor claims and other construction cost. However, CDTA officials, the CM and the architect all cited cash flow as a problem, particularly late in the project. We found that these cash flow problems were attributable to CDTA officials' lack of familiarity with the reimbursement practices of their grant funding sources, and the impact these practices would have on cash flow. For example, grants administered by the State Department of Transportation (DOT) stipulate that CDTA has to pay the vendor and then submit a claim for reimbursement to DOT. However, claims can only be submitted on a monthly or quarterly basis, depending on the funding source. CDTA still has a six-week wait after it submits a claim to receive the reimbursement. Based on the claims process, CDTA needed reserves of at least eight to ten weeks worth of contractors' bills. However, CDTA did not always have such sufficient reserves and had to slow down payments to contractors, thus slowing down the fast track schedule. According to CM and CDTA officials, some contractors stopped working until they received

payment. To pay bills and keep the project moving, CDTA borrowed about \$1.5 million from other CDTA funds and took out \$3.3 million in bank loans, adding interest expense to the project's cost.

We also found that cost overruns caused additional project delays. CDTA and CM officials told us that cost overruns forced CDTA to slow down the project while it found additional funding sources. Examples of this include: the CM told us that the contract for railroad bypass track work was originally scheduled to be completed by February 2001, but was not initiated until December 2001 when a funding source was found; a CM official also told us that from about November 2001 to February 2002, the release of bid solicitations was held until funding sources were identified; a project status report indicated that a contract for the Passarelle and the completion of platform "B" had been put out to bid, but that CDTA had postponed the bid opening indefinitely to reevaluate its financial capacity. As funding was to be made available in the State budget, CDTA planned to wait for the budget's passage to award the contract, estimated at about \$4 million.

Given the increase in the Rail Station's estimated cost, some design features originally in the project have been scaled back or eliminated as a cost-saving measure. Examples of eliminated features include some track work and covered walkways on the top deck of the parking garage. Several examples of areas that were scaled back include the level of landscaping and the quality of some materials. However, reductions in the quality of materials were approved by the architect. Thus, the Rail Station that is now estimated to cost \$53.1 million will not include some of the initial design features.

Rail Station cost overruns also impacted other projects. CDTA officials told us that, due to a lack of funding, they delayed or cancelled two projects: the Cohoes Park and Ride, and the STAR bus garage. CDTA staff conceded that some of the money used to cover the Rail Station cost overrun could have been used to fund other projects.

(In response to our draft report, CDTA officials indicate that projects were postponed due to management's decision to avoid having multiple projects in progress. They claim that a lack of funds was not a factor.)

Project Management and Monitoring

To complete a major capital construction project, as originally scoped, on time and on budget, an organization must efficiently manage the project and monitor its progress. Further, organizational leaders in an oversight role, such as the CDTA Board, should have adequate information to make project determinations and should approve changes to the project in a timely manner. However, we found that CDTA does not track project budgets to actual cost, report total project cost, or obtain the Board's timely approval of project changes. These problems occur because CDTA's accounting system cannot timely and accurately track the cost of projects with multiple funding sources, and because CDTA lacks a system to track transactions that require Board approval. We also found that CDTA officials could not document the extent of project information and detail provided to the Board and used to reach a decision on whether to proceed with the Rail Station project.

Accounting System

Capital construction project budgets are an important cost monitoring and control tool. Actual cost should be routinely tracked against budgeted cost so that potential problems can be promptly detected and management can take corrective steps. CDTA uses a grants approach to track the cost of capital construction projects by charging the expenditures for different projects against one or more grants. This approach enables CDTA to quickly determine the cost of projects with one grant and is sufficient for the six smaller projects CDTA undertook in our audit period. However, CDTA had difficulty determining the cost of the Rail Station project because it used funds from 16 different grants. The grants approach is slow and has an increased chance of error for projects with multiple grants, because each grant must be checked and manually compiled to determine the project's total cost.

In addition, the grants accounting method may not accurately capture project cost. For example, CDTA receives a grant to do planning on numerous projects. Since CDTA's accounting system merges all planning costs, the total cost of individual projects can be understated if the planning cost for each project is not appropriately transferred to the cost of that project. In another example, CDTA was reimbursed \$253,522 in insurance proceeds when a Rail Station contractor defaulted. CDTA's

system recorded these funds as revenue rather than as a reduction in project cost, which overstated the cost of the project. A project cost system is a better method of accounting for capital project cost, because the system tracks cost by project rather than by funding source, reduces the need for manual compilations, and provides more timely and accurate cost information. For example, a project cost system would apply insurance proceeds to reduce the cost of the project.

For the Rail Station project, the CM tracks construction cost and CDTA tracks both the construction and non-construction cost (land acquisition, engineering and architect expenses). The CM tracks construction cost so it can authorize payment for contractors' billings and avoid duplicate payments. CDTA also tracks construction cost for its own purposes, which include obtaining sufficient revenues to cover construction costs, tracking cash flow and determining whether funding sources are fully expended. These two cost records must be reconciled to identify errors or omissions. CDTA officials and the CM told us that they attempted to reconcile their cost figures, but were not able to. They also told us it became too time-consuming to compare each transaction to identify the cause of each discrepancy and CDTA officials believe the difference is immaterial. CDTA told us that it has now implemented a system to send monthly reports of bills paid to the construction manager. Officials also said the employee assigned to track project cost left the agency and was not replaced for six weeks. Since CDTA needed reliable cost information about the project, but lacked assurance in its internal cost records, it paid a public accounting firm \$25,000 to certify the cost of the Rail Station project. To avoid similar problems with future capital projects, CDTA should implement a project cost system. CDTA should also plan to regularly reconcile its construction cost records to those of any other party that maintains project cost records to provide assurance that the costs reported by each vendor are accurate and can be relied upon for project costs. CDTA officials told us that they have implemented a project cost system for use on the rail station project in Saratoga Springs.

CDTA Board Approval

CDTA's Purchasing Guidelines (Guidelines) require that certain business transactions be submitted to the Board for review and pre-approval to provide the Board the opportunity to monitor project activity. For example, the Board must approve contracts

that exceed \$100,000, single bid or sole source awards that exceed \$25,000, and change orders that exceed the lesser of 20 percent of the initial contract amount or \$50,000. CDTA should have a system in place to track transactions that require Board approval, especially for a large project like the Rail Station. However, we found that CDTA does not have such a system, with the result that some transactions were not approved until two years after they had occurred.

In June 2001, the Board requested information on change orders that were already processed. Although CDTA officials had engaged in about two years of construction activity, they had not sought Board approval for change orders. On August 11, 2001, CDTA submitted and received Board approval for Resolution No. 23 - 2001 that included all of the change orders generated for the Rail Station as of that date. These change orders involved 16 contractors and totaled about \$2.4 million. The resolution did not identify the number of change orders covered by this resolution, and Board approval was not required for all of them. However, CDTA submitted all change orders for a blanket approval by the Board rather than separating out those requiring approval. Out of 358 change orders generated as of September 27, 2001, the date of our audit test, we identified 17 that required approval because they exceeded the lesser of 20 percent of the awarded contract value (2) or \$50,000 (15). All of them were approved on August 11, 2001. The value of the change orders and the time elapsed from the date of CDTA approval and execution to the date of Board approval are shown in Table 3. Two of these 17 change orders did not have Board approval as of February 13, 2002. (In response to the draft report, CDTA officials indicate that the two change orders were approved by the Board on March 13, 2002.)

Table 3: Rail Station Change Orders Not Approved Timely by Board		
Amount of Change Order	CDTA Approval Date	Months Elapsed Between CDTA and Board Approval
\$52,835	8/3/99	24
63,000	8/31/99	23
57,395	1/24/00	18
61,004	8/4/00	12
82,900	12/7/00	8
87,600	12/7/00	8
130,092	10/2/00	10
54,800	9/3/00	11
52,233	5/18/00	15
80,492	5/18/00	15
78,492	6/12/00	14
50,000	2/29/00	17
32,982*	10/16/01	No Board approval
109,840	9/25/01	No Board approval
(9,673)**	2/1/01	6
173,000	10/14/99	22
130,502	1/12/01	7
Total: \$1,287,494		

* Exceeded 20% of initial contract amount of \$142,144.

** Exceeded 20% of initial contract amount of \$33,417.

Resolution No. 23 - 2001 also included Board approval of two pre-purchases (material purchased before construction starts to avoid delay and added cost) of steel beams for the Rail Station project. The Resolution did not include each of the bids obtained or the names of the vendors that submitted the bids. These pre-purchases of \$177,908 and \$105,640 had already been completed and paid for on December 16, 1999 and April 3, 2000, respectively. Each transaction exceeded \$100,000 and should have been pre-approved by the Board, as required by the Guidelines. A CDTA official told us that not submitting these pre-purchases for Board approval might have been an oversight due to the hurried environment of the project. The effect of the blanket approvals of change orders and pre-purchases long after the transactions have taken place is that CDTA officials approved these decisions rather than the Board, as is mandated by the Guidelines. In response to our preliminary findings, CDTA officials indicated that they have a procedure in place for reporting all actions that potentially or actually require Board approval to the Board secretary.

Project Planning

Capital project planning is critical to project success, and is mandated by Section 1305 of the Public Authorities Law (Law). We found that CDTA generally complies with the Law's requirements. However, we also found the Board may not have all the information it needs when making decisions about capital projects, because CDTA does not have a standard project planning methodology or does not retain supplemental planning documents related to capital projects.

The Law requires CDTA to prepare and adopt a five-year plan of capital projects. CDTA's planning department also prepares, and presents to the Board, annual updates of the five-year plans, quarterly reports of the status of major plan initiatives and supplemental planning documents for specific projects. We reviewed the plans, including the annual updates beginning with the 1997-2002 capital plan, and the quarterly reports. We also examined the qualifications of CDTA planning staff. We found the planning staff met CDTA's qualifications for project planning, and that plans were generally complete, except for two omissions. In the first instance, CDTA did not indicate a start date for a planned STAR bus garage in its most recent plan, as required by Law. We were told that this project had not been initiated as of February 24, 2002, due to a lack of funding. We also found that the quarterly reports do not include the status of smaller projects, which may limit the Board's awareness of the staff resources committed to these projects.

Since the Board plays a significant role in selecting and monitoring CDTA projects, we also reviewed the extent to which Board members are informed about current and potential projects so it can assess workload demand against available funding and staffing resources. We reviewed submitted plans, reports and Board meeting minutes, and concluded that the CDTA does report the status of larger projects to the Board. However, we also found references to packages of supplemental planning documents that were provided to the Board during our audit period. When we requested these documents CDTA officials told us they did not retain them as part of the meeting minutes. Further, the Board's by-laws do not address retention of such planning documents, even though they may impact a decision to initiate a project. With the exception of its request to review change orders, we found no

evidence that the Board requested information related to monitoring the Rail Station project.

We also found CDTA does not use a standardized project planning methodology to provide all relevant information to the Board for deliberation on project approval. Such information for a formal planning methodology could include: the roles of CDTA staff on the project; the adequacy of CDTA systems and the experience of CDTA staff to handle the project, and any changes that are required; the roles of other parties involved; funding sources and amounts; and potential risks associated with the project. CDTA should establish a formal standardized planning methodology to use for every project - and especially any large-scale project - it undertakes. Following such a methodology would give CDTA the assurance that it has gathered comprehensive information about the demands of the project and the resources CDTA has to commit to the project before the Board decides on a course of action. CDTA officials told us that they have taken action to include project implementation schedules in the five-year plan and are developing a standard project planning form for Board information.

Property Leasing and Management

In addition to overseeing the construction of the Rail Station, CDTA has to lease the available space and develop a plan for the facility's day-to-day operation and maintenance. We found that, as of March 2002, with only three months to the scheduled opening in June 2002, CDTA had entered into a contract to lease space with only one tenant (the U.S. Postal Service) and plans for the ongoing maintenance and operation of the facility were not finalized. In addition, CDTA provided no evidence of any progress in marketing, designing or leasing the space on the second or fourth floors, and had not developed written plans for other important services, including ATMs, pay telephones and trash collection - all essential for the routine operation of the Rail Station. We attribute the lack of progress in these areas, in part, to CDTA's lack of a comprehensive marketing plan and lack of experience with facility leasing. As a result, CDTA had significant work remaining prior to the planned June 2002 opening, before leased space can be ready for occupancy. Timely completion of lease activities is necessary so that customer services are available and so that CDTA can maximize lease revenue to offset operating expenses of the Rail

Station. We estimate that CDTA could lose about \$20,000 per month in lease income if the retail tenants are not operational when the Rail Station is projected to open.

Leasing and Operation of Space

The Rail Station has four floors: the third floor is the main floor where Amtrak facilities and retail operations will be located; the fourth floor will contain office space, conference facilities and a business center; the first floor is non-public space for building infrastructure, storage and train operation facilities; and the second floor is also non-public space for Post Office and Amtrak back office operations. CDTA officials told us that they are negotiating leases with Amtrak on their own and are finalizing terms with a leasing agent to lease space on the fourth floor.

CDTA reports that they have made additional progress on facility leases since our fieldwork ended. As of May 9, 2002 the Board had approved leases with contractors for a restaurant and newsstand. They are still negotiating lease terms with Amtrak. However, CDTA still needs to sign the leases, and vendor space needs to be “fit up.” CDTA must expedite their progress in leasing Rail Station space. (In response to the draft, CDTA reports that it has now signed leases with four tenants and is nearing completion of negotiations with Amtrak.)

During our audit we found that CDTA had not developed a plan for the ongoing management of the Rail Station and whether it would be done in house or under contract, and had not developed a cost benefit analysis of these two options. We contacted officials from several public authorities that routinely lease space to vendors. Two of these authorities have a separate real estate department, and lease space pursuant to a marketing plan. We also found that CDTA staff did not have leasing experience and direct knowledge of the tasks necessary to lease and operate the space, the time the tasks will take, and the resources necessary to carry them out. CDTA officials told us they spoke to officials at Albany International Airport and Central New York Transit Authority to obtain information about leasing Rail Station space. However, CDTA did not visit other authorities with a history of relevant experience (railroad and bus operations) to obtain insights that would help CDTA maximize revenue and avoid pitfalls in space leasing and facility operation. For example, officials at one authority we visited told us that they lease advertising space on trashcans in a railroad

station to provide a steady stream of revenue to offset the expense of trash collection.

Subsequent to our fieldwork, CDTA provided the Board with a cost benefit analysis of managing the Rail Station and contracting this function out (April 1, 2002). CDTA's analysis concluded that there was little if any cost difference between CDTA managing the Rail Station and having a property management firm perform the work. Therefore CDTA recommended to the Board that this function should be done under contract. As of May 9, 2002, the Board approved contracts for Rail Station property management, parking garage management and janitorial services.

Capital Investments

Before tenants can occupy space in the Rail Station, their space must be built out (fit up) to include specific features, such as work counters, shelving and storage areas. Officials at one of the authorities we met with told us that they require tenants to pay for fit up cost, and that this requirement is stated in their RFPs. Similarly, CDTA's RFP for Retail Concessionaires states: "The Authority will require the selected Concessionaire to plan, design and build out, at their sole cost, their designated spaces." However, contrary to the terms of its RFP, CDTA plans to spend about \$500,000 on capital improvements for the Postal Service lease and has approved and paid for change orders totaling over \$129,000 for design changes to accommodate both Amtrak and Postal Service space fit up. These expenses were not part of the original budget, but were introduced as additional cost during the construction phase. CDTA officials told us that the rent the Postal Service pays will reflect CDTA's cost of fit up. We question CDTA's decision to pay the fit up cost, since it has limited capital to complete a project that is over budget. To avoid further construction cost overruns, CDTA should have required the Postal Service to fund its fit up cost and negotiate a lower lease rate. CDTA told us that the Postal Service standard lease for properties of this size requires the owner to perform the fit up. CDTA officials told us that they plan to use their own funds to reimburse any Federal or State grant funds used for the Postal Service fit up.

CDTA's RFP also states it will buy out the concessionaire's capital investment at 60 percent at the end of 5 years, or at 30 percent at the end of 10 years, if CDTA does not extend the

lease. Both authorities we visited told us that they would not reimburse after a ten-year period regardless of how the lease is terminated. In their opinion, ten years gives vendors sufficient time to recoup their investment. We conclude that such a restrictive and potentially costly contract provision could have negative consequences for CDTA in the future, and serves to illustrate CDTA's lack of experience with leasing activities. CDTA officials subsequently provided us with evidence that it changed this contract clause.

Recommendations

1. Implement a system to better track and retain project documentation, such as the initial design and project schedules.
2. Prepare and retain documentation to support the Rail Station critical path and cost increases including a review of cost estimates and to explain the remaining \$1.74 million difference between the August 1997 and November 2001 estimates.
3. Implement an accounting system to track cost for each capital project.
4. Identify and track transactions requiring Board approval by establishing a system that includes the date the transactions are submitted to the Board for approval and the date of the Board's decision.
5. Include initiation and completion schedules for all projects in the five-year plan.
6. Develop standard project planning forms to collect information that will be presented to the Board when it considers a proposed project. Maintain these forms, as well as any other information the Board uses in its' deliberations, with Board minutes. Project planning forms should address, at a minimum, the following:
 - staff experience and expertise with the type and size of capital projects being planned;

Recommendations (Cont'd)

- construction method used;
 - funding sources, reimbursement methods and cash flow; and
 - impact on other ongoing or planned projects.
7. Develop a marketing or action plan for the prompt completion of leasing activities for the Rail Station and establish procedures that require the development of marketing plans for future facility leasing projects.
 8. Contact other public authorities that are engaged in railroad and leasing businesses to solicit information on best practices for leasing and maintaining the Rail Station.
 9. Do not use Federal and State grant funds to pay for the fit up of tenant space.
 10. Eliminate the contract provision to reimburse concessionaires for capital investment cost after ten years.

Summary of Rail Station Cost Increases Per CDTA As of May 2001		
Category	Description	Cost (millions)
Sitework	Power line relocation – unexpected cost associated with increasing power supply to the neighborhood.	\$.143
	Water line relocation – CDTA installed a new water line for the City as part of construction work – financed by city of Rensselaer.	.3
	Access road to Amtrak maintenance facility – City, Boys Club and School District requested a new access road to improve safety.	.2
	Street Cleaning / pedestrian bridge demolition	.1
	Bridge demolition – demolition of the Herrick Street Bridge and a smaller pedestrian bridge over the tracks was not included in the original estimate.	.4
	Construction Phasing railroad – diminished productivity due to increased railroad operation.	.3
	Temporary parking – additional temporary surface parking due to increased ridership.	.15
	Subtotal	\$1.59
Station building	Roof replacement – The first roofing contractor defaulted and the replacement contractor had a higher bid.	\$2
	Energy efficiency upgrades – Changes to windows and electric equipment to reduce energy use. (financed by NYSEERDA)	.15
	Post Office Fit up – Post office will require tenant fit up. (financed through USPS lease)	.5
	Temporary heat – Temporary heat through two winters was not anticipated.	.1
	Amtrak requirements – furnishings, ticket counter, wiring, PA system.	.3
	Steel upgrade – The roof design was altered from a round vault to straight truss.	.2
	Electrical upgrade – switchgear purchase to buy wholesale power, lighting upgrade, backup power supply, individual power metering.	.3
	Clock tower – added after estimate.	.3
	HVAC controls – upgrade for energy conservation.	.1
	Coordination issues – problems in schedule coordination among trades.	.3
	Mezzanine HVAC – design revision after contract award.	.2
	Railroad related contract delays.	.17
Subtotal	\$2.82	
Walkways and Platforms	Wider walkway – Original design of the walkway was 12' and was increased to 28' to accommodate higher customer volume.	\$1.2
	Escalators – The original design did not include escalators from the platforms to the walkway. This was an Amtrak requirement.	.7
	Elevator – Elevators with more glass are being used to enhance security in the walkway.	.13
	Scheduling conflicts – Increased railroad activity reduces productivity of contractors.	.15
	Subtotal	\$2.18

Category	Description	Cost (millions)
Garage	Seismic design – Federal design requirements, instituted after the initial estimate, required design to be earthquake resistant.	\$1.0
Garage	Top Entrance – In response to concerns raised during environmental review, an entrance to the garage from the top of the garage was included.	.5
	Reinforcing – Garage had to be reinforced to accommodate trucks and buses.	1.0
	Subsurface conditions - soil conditions were very unstable due to wet spring in 2000.	.4
	Subtotal	\$2.9
Herrick Street Bridge	Decorative brick – proposed for bridge columns.	\$.3
	Concrete railing – upgraded railing chosen.	.2
	Railroad coordination – Increased railroad activity diminished productivity.	.1
	Subtotal	\$.6
Soft Cost ¹	CDTA Administration – (project representation, insurance financing)	\$.6
	Additional design fees – trackside.	.3
	Additional design fees – landside.	.5
	Contingencies.	.9
	Additional construction managers' fees.	.7
	Subtotal	\$3.0
Track work ²	Track work requirements were increased to accommodate the high-speed rail program, freight trains, and increased train traffic.	\$7.0
Total		\$20.09

Note:

¹ Exhibit A shows only \$3 million of the \$10.3 million in additional costs for the soft cost category. Based on other cost records, the \$3 million understates some items and may omit others. Therefore, we used the November 2001 estimate for explained Non-Construction costs.

² Exhibit A shows an increase of \$7 million (as of May 2001), which does not agree with the Table 2 estimate for track work, a decrease of \$6.1 million (as of November 2001). According to CDTA officials, the Exhibit A figure includes track movement, and the addition of a fourth and fifth track. The Table 2 figure includes only track movement. The fourth track has been postponed and the fifth track will now be paid for separately by DOT.

MAJOR CONTRIBUTORS TO THIS REPORT

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August 1, 2002

Ms. Carmen Maldonado
Audit Director
Office of the State Comptroller
Division of Management Audit and State Financial Services
123 William Street - 21st Floor
New York, NY 10038

Re: Draft Audit Report (2001-S-48)
Capital Construction Management Practices

Dear Ms. Maldonado:

We offer the following comments on the audit of Capital Construction Management Practices conducted by your staff.

EXECUTIVE SUMMARY

Page 1. Very preliminary planning in 1996 and 1997 anticipated a construction completion in 2000. As the Authority became more aware of the scope and complexity of the project, we revised our anticipated completion date to 2001 at the June, 1999 groundbreaking. Some of this was driven by the fact that the necessary trackwork had to be accomplished by force account labor from CSX Transportation, Inc., the track owner and Amtrak. The railroads had scheduled commitments to other projects.

Page 1. The \$34 million estimate did not include construction management fees, land acquisition and contingencies. We feel that a more realistic base estimate was \$43 million, the estimate at the groundbreaking.

Page 2. second paragraph. The number of change orders and information requests is a function of a number of things including complexity of scope, resourcefulness of the contractor and clarity of the design. Construction coordination is only one of several factors which generate requests for information on the part of construction contractors.

David M. Stackrow
Chairman
Rensselaer County

Donald C. MacElroy
Vice Chairman
Saratoga County

Henry S. DeLegge
Secretary
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Executive Director

*
Note
3

CAPITAL DISTRICT TRANSPORTATION AUTHORITY
110 Watervliet Avenue, Albany, N.Y. 12206

*See State Comptroller's Notes, Page B-6

Ms. Carmen Maldonado
August 1, 2002
Page Two

Page 2. Second paragraph. We reviewed the data explaining the increase in cost of the Rensselaer Station and later in this letter provide a more complete explanation of cost changes in this project from its inception.

REPORT

Page 1. The Commuter Rail project, which we have determined to be infeasible, was an operating demonstration project, not a capital project. CDTA is not involved in a light rail project between Albany and Schenectady.

Page 2. We feel that the table on page 2 should contain a column illustration change orders as a percentage of Reported Final Cost. This would provide a more clear presentation of the data.

Page 3. Second paragraph. The new rail station including the walkway has approximately 72,000 square feet.

Page 3. Third Paragraph. The construction manager was responsible for the preparation of bid documents not requests for proposals. We used a sealed bid process for construction contractor selection.

The construction manager is also responsible for coordinating the work of the contractor and the design team.

Page 3. Last paragraph – (Also in Executive Summary, page 1) Very preliminary planning in 1996 and 1997 anticipated a construction completion in 2000. As the Authority became more aware of the scope and complexity of the project, we revised our anticipated completion date to 2001 at the June, 1999 groundbreaking. Some of this was driven by the fact that the necessary trackwork had to be accomplished by force account labor from CSX Transportation, Inc., the track owner and Amtrak. The railroads had scheduled commitments to other projects.

Page 5. CDTA did provide the requested documents including the land acquisition schedule, current construction schedule and critical path.

Page 7. First paragraph. No capital projects were cancelled due to lack of funds.

Page 7. First paragraph. Line 16 – The use of fast track construction, by itself, did not cause cash flow problems.

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* See State Comptroller's Notes, Page B-6

Ms. Carmen Maldonado
August 1, 2002
Page Three

Page 8. First paragraph. We have signed tenants leases with 4 tenants at present. These are the United States Postal Service, a restaurant, a news/gift shop and an ATM vendor.

Page 8. Third paragraph. CDTA recognized its inexperience with construction projects of this size and therefore engaged a construction manager.

Page 9. Last line of first paragraph. These are **alleged** delays

Page 11. Table 2 – The report cites as unexplained certain cost increases. We have reviewed our data and propose inclusion of the Revised Table 2 at the end of this letter. Most of the cost differences which were not explained previously were the result of inflationary increase in construction costs due to delays in the project.

The report says that these cost increases were described but not documented (page 10). There is clear documentation of all change orders, and many scope changes. The additional costs due to delays are difficult to precisely document. However, we did rely on judgment of experienced professionals in arriving at the estimates in Table 2.

Page 13. Fourth paragraph. The Cohoes Park and Ride lot was a concept proposal which was abandoned due to its not being feasible. The STAR bus facility has been postponed until completion of the Rensselaer and Saratoga Springs Train stations. This is due to concerns about management of multiple projects not project financing.

Page 14. First paragraph. We received monthly reports on construction activity from our construction manager listing both project budgets and obligations. There is a monthly report to the Board on the project and there was participation from Board Members in nearly all project meetings.

Page 15. Second paragraph. The cost certification was performed at the completion of the first phase of the project and was performed for a number of reasons, most notably to assure that charges to the large number of State and Federal grants were appropriate.

Page 16 and 17. The two cited change orders were approved by the Authority Board on March 13, 2002.

Page 19. CDTA has signed agreements with a property management firm, a parking management firm and a janitorial services firm. A broker has been

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* See State Comptroller's Notes, Page B-6

Ms. Carmen Maldonado
August 1, 2002
Page Four

engaged for marketing the leasable space on the fourth floor. We have signed tenant leases with a restaurant, a news and gift shop, an automatic teller machine concessionaire, a taxi vendor and a car rental agency. We are nearing completion of our negotiations with Amtrak.

Page 20. We will continue to seek all possible sources of revenue for the facility.

Page 21. Third paragraph. The language in our request for proposals stating we would buy out the lease after 10 years if we terminated the lease was removed from all leases as recommended in the audit.

As to the specific recommendations contained in the audit report, our reply is as follows:

1. Implement a system to better track and retain project documentation, such as the initial design and project schedules.

CDTA concurs with this recommendation. A project scheduling system has been implemented for major construction projects. This will enable better monitoring of construction schedules.

2. Prepare and retain documentation to support the Rail Station critical path and cost increases including a review of cost estimates and to explain the remaining \$1.74 million difference between the August 1997 and November 2001 estimates.

CDTA concurs with this recommendation. A brief explanation of the remaining cost difference is offered previously in this response.

3. Implement an accounting system to track cost for each capital project.

CDTA concurs with this recommendation. A project accounting system has been implemented and will be used in the Saratoga Springs Rail Station project, construction of which is about to commence.

4. Identify and track transactions requiring Board approval by establishing a system that includes the date the transactions are submitted to the Board for approval and the date of the Board's decision.

CDTA concurs with this recommendation. This will be implemented with the next construction project and all future construction projects.

Ms. Carmen Maldonado
August 1, 2002
Page Five

5. Include initiation and completion schedules for all projects in the five-year plan.

CDTA concurs with this recommendation and will institute this with the next update of the Authority's Five Year Plan.

6. Develop standard project planning forms to collect information that will be presented to the Board when it considers a proposed project. Maintain these forms, as well as any other information the Board uses in its deliberations, with Board minutes. Project planning forms should address, at a minimum, the following:

- Staff experience and expertise with the type and size of capital projects being planned;
- Construction method used;
- Funding sources, reimbursement methods and cash flow; and
- Impact on other ongoing or planned projects.

CDTA concurs with this recommendation and will institute this on future major construction projects (over \$200,000).

7. Develop a marketing or action plan for the prompt completion of leasing activities for the Rail Station and establish procedures that require the development of marketing plans for future facility leasing projects.

CDTA has concluded lease activity for the Rensselaer Rail Station with the exception of Amtrak and the 2,900 square foot office area. CDTA has engaged a real estate broker for this property. This firm has developed a marketing strategy for this space. CDTA will prepare an action plan for any commercial leases at the Saratoga Springs Rail Station, construction of which is about to commence.

8. Contact other public authorities that are engaged in railroad and leasing businesses to solicit information on best practices for leasing and maintaining the Rail Station.

CDTA concurs with this recommendation. We will continue to work with other public authorities to solicit information on station leasing and maintenance.

Ms. Carmen Maldonado
August 1, 2002
Page Six

9. Do not use Federal and State grant funds to pay for the fit up of tenant space.

CDTA concurs with this recommendation. CDTA has not used Federal and State grant funds to pay for this fit up of tenant space and will comply with all applicable laws and regulations governing tenant fit up.

10. Eliminate the contract provision to reimburse concessionaires for capital investment cost after ten years.

CDTA concurs with this recommendation. This provision has been stricken from all tenant leases.

Thank you for the opportunity to respond to the draft audit.

Sincerely yours,


David M. Stackrow
Chairman

cc: CDTA Members
Executive Director

State Comptroller's Notes:

1. CDTA provided the land acquisition schedule and the report has been changed to reflect this. However, CDTA provided only partial documentation of the construction schedule and critical path.
2. This contradicts statements made by CDTA officials during our audit.
3. We have revised the draft report to address CDTA's comments.

* See State Comptroller's Notes, Page B 6

Table 2: CDTA Rail Station Project
Project Cost Estimates (in millions)

Category	August 1997	July 2002	Cost Increase (Decrease)	Explanation	Not Explained
Trackwork	\$ 8.50	\$ 3.04	\$ (5.46)	(5.46) 4th track on hold higher cost	\$
Station and Tenant	\$ -	\$ 20.39	\$ 8.89	6.59 scope upgrades 1.61 change orders 0.69 inflation 8.89 Total	\$
Bridge	\$ 3.00	\$ 4.26	\$ 1.26	0.9 scope upgrades 0.193 change orders 0.18 inflation 1.273 Total	\$
Parking Garage	\$ 8.00	\$ 11.11	\$ 3.11	2.9 scope upgrades 0.21 change orders 3.11 Total	\$
Non-construction (Architect/Engineer Fees, CM Fees, Administration and Land Demolition)	\$ 3.00	\$ 13.74	\$ 10.74	6 professional fees 0.6 land acquisition 4.3 site/utilities 10.9 Total	\$
Contingencies	\$ -	\$ 0.65	\$ 0.65		\$
	\$ 34.00	\$ 53.19	\$ 19.19		\$