Table of Contents

An Audit Report on Management Controls at Texas Correctional Industries

November 1997

Table of Contents, concluded

Key Points of Report

An Audit Report on Management Controls at Texas Correctional Industries

November 1997

Overall Conclusion

Neither the Texas Department of Criminal Justice (Department) nor the Board of Criminal Justice has required Texas Correctional Industries (TCI) to demonstrate results or to implement sound controls over operations. As a result, TCI has not implemented sufficient management controls to accomplish its statutory objectives. In addition, TCI has not developed accurate cost or management information to assess factory efficiency, make informed decisions about product prices, or determine factories' profits or losses.

In fiscal year 1996, TCI operated 44 factories that produced uniforms, mattresses, and other items for Department inmates and guards as well as furniture, license plates, and jail steel for external governmental entities. Reported internal and external sales for the fiscal year totaled almost $96 million.

Key Facts and Findings

- TCI has not ensured that the 8,000 inmates who work in its factories receive effective vocational training or that factory operations contribute to recovering the cost of incarceration. These goals are encompassed in TCI's five legislative mandates.

- TCI has not effectively controlled its operations or developed information to assess the degree to which it has contributed to recovering the cost of confining inmates:

    - TCI does not use many of the financial indicators commonly used by manufacturing concerns to assess the efficiency of factories' day-to-day operations and has not developed substitute indicators. Implementation of TCI's new information system is more than one year behind schedule. Without this system, TCI management does not readily have access to information which would facilitate production planning, sales forecasting, or other routine management decisions.

    - TCI's cost accounting system does not effectively track costs or allocate overhead to inventory. Therefore, TCI does not have reliable information to make decisions about pricing or to determine which factories are profitable.

    - Controls over TCI's $24.2 million worth of inventory cannot ensure that the raw materials, consumables, and other items purchased for production purposes are adequately protected from theft or loss.

Contact: Charles R. Hrncir, CPA, Audit Manager, (512) 479-4700

Office of the State Auditor
Lawrence F. Alwin, CPA

This audit was conducted in accordance with Government Code, Section 321.033.

TCI Has Not Effectively Managed Factory Operations or Results

Texas Correctional Industries (TCI) has not implemented sufficient management controls to ensure that inmates are provided with effective vocational training or that operations contribute to recovering the cost of confining inmates. Specifically:

- TCI has not clarified its purpose or used strategic planning to accomplish all of its statutory objectives. In addition, operational plans have not been used to ensure the successful implementation of new industries and product lines or to design and implement TCI's new information system.

- TCI does not have information to assess the results of its operations. TCI does not measure its success in providing job training or other outcomes. In addition, TCI does not use many of the financial indicators commonly used by manufacturing concerns to assess the efficiency of factories' day-to-day operations and has not developed substitute indicators.

- Much of the information TCI prepares or collects is not accurate. TCI's cost accounting system does not effectively track costs. Therefore, TCI cannot make informed decisions about pricing and does not have good information about factories' profits or losses.

- Controls are not sufficient to safeguard assets from waste or loss. Inventory is subject to theft or loss and cash has not been managed to ensure customers pay for goods and services delivered.

Having neither controls nor information in these key areas significantly increases the risk that TCI assets could be misappropriated without detection or that TCI operations will not produce desired results. While implementation of sound management controls cannot eliminate these risks, good controls can reduce the opportunities for fraud, waste, and abuse to occur and can provide an early warning system for identifying potential problems.

TCI Operates in a Challenging Environment

Numerous factors affect how TCI operates and manages its factories. TCI cannot directly control these factors, but each can affect TCI's ability to provide inmates with effective vocational training or reduce the cost of their incarceration:

- TCI does not control which inmates are assigned to work in its factories or even how long assigned inmates will remain working in a given factory. Wardens and Unit Classification Officers make these decisions based on a variety of factors (which do not always include TCI's needs or goals).

- When units are "locked-down" for security reasons, factory operations must be suspended. Lock-downs occur whenever there are inmate riots or other security risks.

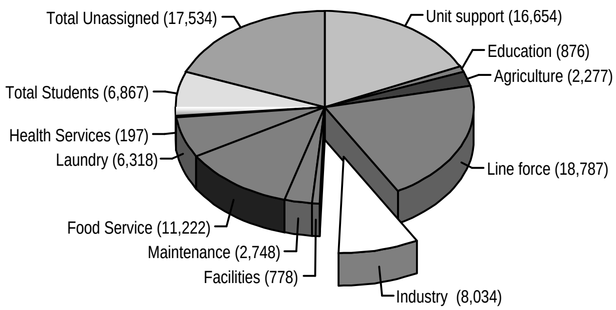
- TCI does not pay inmates and can provide limited incentives to encourage inmate productivity.

- TCI relies on the General Services Commission and on the Texas Department of Criminal Justice's Purchasing Department to procure raw materials to meet its production schedules. Problems in these areas have led to delays in fulfilling orders and in temporary closures of production lines and factories.

Executive Summary

Inmate Distribution - August 29, 1996
(working and non-working)

Of the 92,292 inmates in Department prisons on August 28, 1996, 8,034 or 8.7 percent of the total were assigned to Texas Correctional Industries. Unassigned inmates include among others: those in administrative segregation (8,209), in transit (2,674), or who had a medical exemptions (2,802). Of the inmates assigned to work, almost 12 percent worked for TCI.



Source: Texas Department of Criminal Justice Executive Services

At the end of fiscal year 1996, 44 factories reported on operations for the year. These factories produced "necessity items" (such as inmate clothing, bedding, and shoes) for the Texas Department of Criminal Justice (Department) as well as items for sale to state and local governmental units. Outside sales included items such as license plates and inspection stickers for the Texas Department of Transportation, modular and wooden office furniture, and other items.

For fiscal year 1996, TCI reported its outside sales at approximately $50 million and its sales to the Department at an additional $46 million. (See Section 2-B for discussion of the accuracy of these estimates.) Department records for the last working day in fiscal year 1996 indicate that on that day, 8,034 of the Department's 92,292 inmates worked in a TCI factory.

TCI is a service organization within the Department, but TCI has historically operated independently and with little oversight from the Department's executive management or the Board of Criminal Justice. This lack of attention and accountability has allowed TCI to operate without sound management controls. In addition, because TCI was not challenged to provide accurate, timely information about factory operations, development of processes to produce this information was not a priority.

Recent publicity associated with past contracts and the resulting changes in TCI's division management have presented TCI with opportunities to implement the controls needed to ensure that program results are achieved, good information is available for decision-making, assets are protected, and laws are complied with. In recent months, TCI has begun to strengthen its system of management controls. These efforts include:

- Ongoing communication with the General Services Commission to ensure TCI has the opportunity to bid on sales to eligible customers as well as to ensure TCI's purchases are received on time and fulfill factory requirements
- Initial research to identify barriers to consolidating TCI funding sources and to develop feasible courses of actions to overcome these barriers
- Closer monitoring of receivables and improved collection efforts
- Development of more accurate information about factory overhead through the identification of some actual prior year costs
- Providing division mangers with regular access to budget status reports
- Communication with regional classification groups and unit wardens to share information on how inmate

assignment and other factors affect TCI factory operations.

- Attempts to assess product competitiveness through "product audits"

Appendix 3 presents the results of prison industry audits conducted by other states. The problems encountered by TCI in managing its operations and planning for results are similar to problems in other states.

Summary of Management's Responses

Management concurs with the report's recommendations. Plans to implement corrective action have been developed and some improvements to TCI's system of management controls are already underway.

The cover letter that accompanied management's responses can be found on page 46. The actual responses follow the appropriate recommendations.

Summary of Objective and Scope

Objective

Our audit objective was to examine and evaluate TCI's management controls systems to identify both strengths and opportunities for improvement.

Scope

The scope of this audit included consideration of TCI's overall management control systems: policy management, information management, resource management, and performance management.

This page intentionally left blank.

Section 1:

Focus Efforts on Achieving Specific Results

TCI has not effectively used strategic planning or other mechanisms to ensure that it meets all of its mandated objectives. TCI does not gather the information needed to assess its overall performance and does not measure its success in job training. It also does not use many of the financial indicators commonly used in manufacturing and has not developed substitute indicators with which to monitor efficiency and effectiveness.

In addition, sound operational plans have not been developed to ensure the successful implementation of new industries or product lines or to design and implement TCI's new information system. This increases the risk that TCI will not accomplish its goals, or will enter into industries which are neither profitable nor useful in providing vocational training.

Section 1-A:

TCI Has Not Structured Its Planning Process to Meet Its Statutory Objectives

TCI's Statutory Objectives

Government Code Section 497.022 lists five purposes of the Prison Made Goods Act and TCI:

- Provide adequate, regular, and suitable employment for the vocational training and rehabilitation of inmates, consistent with proper penal purposes.
- Use the labor of inmates for self-maintenance.
- Reimburse the State for expenses caused by the crimes of inmates and the cost of their confinement.
- Provide for the requisition and disbursement of institutional division articles and products through established state authorities to eliminate the possibility of private profits from the distribution of those articles and products.
- Provide materials, products, or articles for sale to or for the use of the State or a political subdivision of the State.

TCI has neither planned nor monitored its activities to ensure that all of its statutory requirements have been met. Clear objectives have not been set to assist management in setting operational priorities. This lack of clarity is evident with respect to the overarching purpose of TCI and with respect to the way it conducts its strategic planning.

TCI has not managed its operations in a way that ensures all of its statutory objectives are accomplished. TCI's enabling legislation includes five specific objectives that fall into two general categories: providing vocational training and recovering some of the cost of incarcerating inmates. Historically, TCI has not considered itself to be a vocational treatment program, but rather a work program that provides goods and services to customers and teaches inmates a "work ethic." As such, TCI has not developed strategies to fulfill the full scope of its mandated purpose.

Providing training and reducing costs can be contradictory goals. Some industries that are the most profitable may not result in job training or skills that an inmate can use upon release. Therefore, without clearly articulating program purposes and designing measurable objectives to address them, TCI will be unable to plan its future course or demonstrate that it successfully provides vocational training or reduces costs.

TCI has not implemented its strategic planning function in a way that facilitates comprehensive planning and program evaluation. TCI's most recent strategic plan is almost three years old (it is dated June 30, 1994), and it does not set forth clear objectives for program operations related to meeting the Texas Department of Criminal Justice's (Department) stated goals or to meeting TCI's mandated objectives. For example, the plan's first strategy is to "complete Strategic Management Plans and operate the entire Industrial Division using operational strategic planning by January 10, 1995" instead of stating what TCI aims to accomplish with its program.

TCI management has recently begun "quarterly divisional review meetings" and considers these meetings strategic planning meetings. However, these meetings do not emphasize long-range strategic directions and include only short-term detailed problem-solving. At the three recent meetings we attended, there was no discussion of long-range goals for the division of TCI under review or for TCI as a whole. For instance, discussions we observed concerned how to increase sales or what should be done with unused assets.

TCI policy No. 09.06.001 (dated July 31, 1995) requires each TCI division and industrial facility to have a Strategic Management Plan. These plans are to include goals and actions plans to accomplish division-wide goals. This policy has never been enforced, and, according to TCI management, has been discontinued. Alternative mechanisms to implement division goals have not been developed.

The Department, too, has historically not used TCI as a program to provide measurable improvements in inmates' job skills or produce other outcomes. The Department's Institutional Division strategic plan includes one objective and two strategies related to TCI. Of the measures under these objectives and strategies, only the following five pertain to TCI performance:

- Percentage change in number of inmates turned out to work in Correctional Industries Programs compared to fiscal year 1994
- Number of factories operated
- Number of inmates assigned to the Correctional Industries Program
- Clothing articles produced
- Necessity items produced

There are no measures related to TCI's impact on job readiness skills or on the cost of incarceration, and therefore, no means to hold TCI formally accountable for results in these areas.

The Department has recently begun to investigate different options for how it can best provide vocational education and reduce recidivism. Part of this planning process includes refocusing TCI's role within the Department. However, according to Department management, significant changes cannot be made until the Department is better able to track offenders through programs. The Department is currently “re-engineering” its information systems and is expecting to complete this process around the year 2000.

Recommendations:

- Prioritize the goals in TCI’s enabling legislation and develop strategies to fulfill all facets of TCI’s statutory objectives (in alignment with established priorities). This will require input from the Board of Criminal Justice, the Prison Industry Advisory Board, Department executive management, and others.

- Consider developing a separate TCI job training program within TCI. Such a program would include admission criteria, a screening program to identify inmates most likely to benefit from job training, and a plan for program evaluation. This may involve restructuring certain factories so that only screened inmates receive certain jobs and implementing agreements with the Unit Classification Committee that would allow inmates admitted to the program to remain in the program unless there was an identifiable security concern. The remainder of the TCI factories could operate to meet TCI’s other statutory objectives.

- Review the strategic planning process to ensure that the various TCI plans derive logically from the overall Department strategic plan. The Department’s strategic plan would have to be amended to address the function of TCI as job training, a mechanism for Department self-maintenance, or some combination of both.

Management’s Responses:

- *Agree to implement recommendation with modifications. TCI's enabling legislation does not establish prioritized goals, with one objective receives priority over another. Additionally, the recent legislative session increased the number of statutory objectives for TCI. TCI will seek advice on the development of strategies and the newly mandated statutory objectives from the Support Operations Committee TBCJ at the November 20, 1997 meeting. TCI will prepare a report on the outcome of the meeting to the State Auditor.*

- *Agree to implement recommendation. TCI is presently developing a job training program in conjunction with Windham School System. This project, the "Computer Recycling/Refurbishing Program" will be presented to the Support Operations Committee on November 20, 1997 for consideration. TCI will also develop an action plan to increase implementation of existing TDCJ on-the-job training programs that are currently in use in our factories. TCI will create an action team, which will include representatives from the Classification Division and the Security Division, for input and development of an action plan. The action plan will include the development of TCI policies and procedures to address admissions criteria, a screening program to* *identify inmates most likely to benefit from job training and a plan for program evaluation.*

- *Agree to implement recommendation. This recommendation will be addressed in conjunction with Section 1-A. (1).*

Section 1-B:

Information on TCI's Effectiveness Is Unavailable and Additional Measures Are Needed to Report on Financial Performance and Guide Internal Operations

Data from Re-Engineering Could Help TCI Measure Its Effectiveness

The Department is currently developing an automated system to enable it to track offender data more efficiently. Planned in this effort is the ability to "count and categorize offenders by location, status, classification" and to "track offenders' progress through multiple Department programs." TCI will need this type of information in order to assess its effectiveness.

TCI does not track post-release employment for TCI inmates or other outcome indicators and lacks an effective system for measuring its financial performance. TCI considers the profit/loss statements it prepares for each of its factories as indicators of success, but these financial statements do not portray program outcomes. Moreover, the methodology underlying these statements is questionable (see Section 2-B). As a result, reliable financial data is not available to support decision making at the program level, and division and factory managers cannot be held accountable for the profit or losses of their operations.

- **Outcome data is unavailable.** TCI does not track program outcomes. We attempted to gather data on TCI inmates' post-release employment to develop initial data on TCI's success in providing vocational education. However, because neither TCI nor the Department had information on which inmates had consistently worked in TCI factories, we could not compile this information or select a sample for testing.

  Once basic data (such as lists of inmates who have worked in TCI factories for more than six months) is available, TCI will have to work with other Department divisions and groups to ensure inmates are assigned to units and factories based on job training needs. TCI has no control over which inmates are assigned to work in factories, and job training requirements are not the Department's first priority in making inmate assignments to units. In addition, inmates sometimes are pulled from their factory jobs or moved to other jobs. TCI is currently working toward agreements with regional classification groups to ensure that, for highly technical jobs, TCI can count on a core group of inmates not being arbitrarily reassigned.

- **Financial performance data is also largely unavailable.** Throughout TCI, we observed few mechanisms or standard reports containing ratios commonly used in manufacturing concerns. A recent internal audit report cited several standard ratios from Dunn and Bradstreet as benchmarks for assessing TCI performance (such as invoice date to payment date, average collection periods, accounts payable to sales, and sales to inventory). TCI managers objected to the application of such industry benchmarks to their operations. While we agree that the specific benchmarked levels may not be appropriate to prison factories, adoption of such indicators would allow for monitoring of factories relative to each other, similar operations in other states, and over time.

TCI is currently implementing a new information system that was to have made this type of data available to all users. However, when we asked for some of this data, it took TCI staff more than two months to provide us with reports on receivables and customers. In addition, TCI staff had not realized that the new system included a number of "bugs" because the data had not been previously requested or used.

Recommendations:

- Determine some meaningful, easily measurable output measures for TCI to use as immediate, interim indicators of success.

- Develop outcome measures to gauge progress in meeting goals. Present information problems may prevent TCI from obtaining data on recidivism or effectiveness of training efforts, and will require that output measures or proxy measures (such as jobs held after release or length of time a job is held) be used on an interim basis until re-engineering is complete and other outcome measures can be developed.

- TCI should establish a comprehensive monitoring system to focus attention on potential problem areas, identify factories which may have developed exemplary processes, and as a means of gauging factory performance. Routine review and analysis of account balances and their relationships with each other should yield useful information. Some financial and performance indicators that management might find useful include:

    - Units produced by each factory
    - Cost per unit produced
    - Budgeted revenues and expenditures compared to actual revenues and expenditures and expected levels of production
    - Aged receivables (by division, factory, and customer)
    - Outstanding payables (by division, factory, and vendor)
    - Prompt payment discounts received or lost
    - Number of days to fill orders (by division and product)
    - Sales per inmate or per factory staff
    - Re-orders or returns (by division, factory, and product)
    - Inventory turnover
    - Days sales in inventory

- Amount and causes of impairments and variations by factory and division
- Historical information on vendor performance

<u>*Management's Responses*</u>:

- *Agree to implement recommendation. TCI will set up an action team and develop an action plan to implement this recommendation.*

- *Agree to implement recommendation. This recommendation will be developed in conjunction with recommendation 1-B. (1).*

- *Agree to implement recommendation. TCI will form an action team to develop the comprehensive monitoring system.*

Section 1-C:

Decisions to Enter Into New Endeavors Have Not Been Well Informed

TCI has entered into new industries without having obtained enough information to analyze whether these commitments were good business decisions. In addition, the criteria for approving and implementing a proposed new industry are too vague to ensure that the process is not free from outsiders' influence.

The policy for approving new industries needs clarification. In 1996, the Board of Criminal Justice implemented a policy requiring that it approve all new industries. Since that time, five new "industries" have been approved. However, there is no consistency in what is brought to the Board for approval.

Some proposals are taken to the Board even though there is minimal expenditure required. For example, at the September 1996 Board meeting, the Board approved the Clements canvas shoe factory. There was to be minimal expense associated with this factory, because the machine to make canvas shoes had been purchased four years earlier and no changes needed to be made to the existing factory to use the new machine. The other four new industries that the Board approved at the November 1996 meeting were proposed to cost from $850,000 (for the building and equipment at one unit) to $2.8 million (for the building only at another unit).

On the other hand, some decisions that appear to be for new products, or which appear to commit TCI to a long-term course of action, have not been brought before the Board. For example, the decision to purchase two looms to start production of elastic at the Hughes garment factory was not taken to the Board for approval. Approval was obtained from TCI and Department management.

Changes in statutory responsibilities of the Prison Industry Advisory Board may affect how TCI makes decisions related to new industries. House Bill 819, passed by the 75th

Legislature, will require the Prison Industry Advisory Board to advise the Texas Board of Criminal Justice on “all aspects of prison industry operations,” and to report to the 76th Legislature on the nature of its recommendations their implementation.

Using Break-Even Analysis for Decision-Making

Before deciding to begin a new endeavor, TCI should consider whether it can make an item for less than its purchase price. One way to do this is through break-even analysis. If TCI can cover its costs for less than the purchase price, then it may be a good option.

For example, at the October 1996 meeting of the Texas Board of Criminal Justice, it was stated that canvas shoes could be purchased for $3.25 to $3.31 per pair. Using this information and information in the business plan on fixed costs and production estimates, it looks as if it would be less expensive to purchase the shoes than to make them:

Price per pair to purchase:	$3.31
Estimated cost of raw materials (according to the cost analysis used for the Board meeting) :	$2.91
Amount available to cover fixed costs:	$0.40

Estimated annual fixed costs (from business plan): $430,000

Pairs required to produce to break even:

$430,000 ÷ $0.40 = 1,075,000 pairs

However, according to the business plan, “the new shoe factory would be capable of providing 120,000 pairs of canvas deck shoes per shift annually.” Therefore, even if the factory ran 3 shifts per day, it would only be able to produce 360,000 pairs each year—no where close to the million pairs needed to break even.

Analysis of new endeavors has not provided enough information for good decisions. New industries are approved for TCI following internal discussion, and the development of a business plan that, in theory, outlines the costs and benefits of the new industry. This business plan is implemented after it is approved by the director of TCI and the Department’s administration.

Although TCI reports that these business plans are the basis for its decisions, it appears that some decisions related to new industries have been made in other ways. For example, TCI is currently proposing 5 new factories. We have seen a business plan for only one of these. As of June 25, 1997, almost $1.2 million has been spent on these five factories, including almost $300,000 on two factory sites for factories whose industry is still “to be determined.”

The business plans appear to have been compiled hastily and have minimal value as a decision-making tool. We reviewed six business plans for factories which were later implemented and found that:

- Business plans did not consider the number of dollars it would take to produce a given number of units. The business plans that we reviewed listed either expected sales (in dollars) or required number of units if production. (Four of the six listed anticipated sales in dollars, and the other two listed number of units to be produced but no costs associated with those sales.) Without a good estimate of how much it will cost to produce a given number of units, it is difficult to determine the production level at which an endeavor will break even.

- For those plans that included estimates of sales, profits were estimated at 25 percent of sales without analysis to support that assumption. Dollars of sales were generally based on the current amount of sales of that item purchased on state contract in a recent year. How many units those sales figures represented and TCI's ability to produce that number were not included in the plan.

- Payback calculations assumed that sales would equal the current amount of sales on state contract in the first year of full production, and would increase each year thereafter. The amount of the increase appears to have been developed by formula—sometimes at 10 percent per year, and other times at 5 percent for the second year and 3 percent for the third year. No data assessing the ability of TCI to do this was included.

- Business plans did not include estimates of the cost of the raw materials. Projected expenditures consisted solely of capital expenditures and operating expenses. As a result, it is difficult for users of the business plans to perform analysis on their own.

- Contingencies were not considered. Business plans did not consider the effects of reduced production during lock-downs, training periods for staff or inmates, equipment failures, or other reasonably anticipated contingencies. Several of the plans that we reviewed were for items that would be needed as new prison units opened, but they did not consider the effects on sales or production if the units opened sooner or later than planned. In addition, changes in anticipated profits due to changes in the costs of raw materials were not considered. Sensitivity analysis, a "what-if" technique for reviewing how results will change if the underlying assumptions change, would have been useful in developing expectations for the business plans.

- Operating costs listed in the business plans were frequently repeats of estimates used in prior plans. For example, in five of the six business plans we reviewed, equipment leases were estimated at $1,320 per year regardless of the type of business.

- Business plans were not reviewed for arithmetic accuracy. In all six of the plans that we reviewed, the operating expenses listed in the summary section of the business plan did not equal the sum of the operating expenses listed in the detail section of the plan.

- Business plans did not include an estimate of the effects of the proposed business on other TCI industries. For example, the business plan for a new soap manufacturing plant did not include any consideration of the effects this plant would have on the sales and production levels of the soap plant that already existed.

- The process for developing business plans has not been improved through the comparison of the plans' assumptions and actual results. For example, even though many of the plans we reviewed were old, there is no history to support the assumption of a 25 percent profit. In the cost analyses, there is a 25 percent contingency added to outside sales, but the business plans add this profit even for departmental sales. In addition, history suggests that it would be optimistic to assume a net profit on sales of 5 percent. (The financial statements are not reliable or accurate, as discussed in Section 2-B. However, according to these statements, TCI's net profit for fiscal year 1995 was 4.3 percent, and for fiscal year 1996 it was 3.08 percent.)

TCI has begun to make improvements to this process, and has shown a willingness to continue improvements. After discussing some of the concerns that we had with TCI staff, we were provided with a new business plan for our review and comment. The new business plan included some discussion of production capabilities and constraints, and sales based on historical operations. Sales to different customers represented different profit margins, instead of using the 25 percent estimate that used to be in all plans. When we provided comments the response suggested that many of the issues we had raised had been considered, but not included in the business plan.

Recommendations:

- Develop specific criteria and processes for implementation of new businesses. In addition to clarifying the relative costs and benefits of a proposed endeavor, these criteria could reduce the risk that the process could be subject to inappropriate outside influence. Once criteria are developed, TCI might want to consider having the Prison Industry Advisory Board review the plans to ensure that the plans meet all criteria.

- The Board of Criminal Justice should clarify when TCI can make decisions related to new businesses or products and when these decisions should be approved by the Board. The Board's policy should clearly define what a new business or a new product is and should establish a cost above which new products or industries need Board approval.

- Include adequate information in the business plans to facilitate meaningful analysis. Such information should include the estimated costs of producing a specific number of units of product, broken down into variable and fixed costs; the required sales price to recover fixed costs in a reasonable amount of time; contingencies that can be reasonably estimated and their effects on anticipated production and sales; and the effects of the proposed endeavor on other TCI industries. Analysis of best case, worst case, and other likely scenarios, including the effects of each on sales, number of units produced, expenses, and profits would add valuable information for decision making. We have provided TCI with a pamphlet from the Small Business Administration on the development of business plans. Other resources are widely available.

Management's Responses:

- *Agree to implement recommendation with modification. TCI will establish an action team to develop a policy and procedure to achieve the implementation* *of this recommendation. The policy and procedure will to be evaluated by the Support Operations Committee of the Texas Board of Criminal Justice.*

- *Agree with recommendation. TCI will establish an action team to draft a TBCJ policy.*

- *Agree to implement recommendation. TCI will establish an action team to evaluate existing policy to determine modifications needed to achieve recommendation.*

Section 1-D:

Implementation of the Industrial Operations Information System Is Late, and the System Does Not Yet Meet TCI's Information Needs

The Industrial Operations Information System (IOIS) could improve TCI financial and operational management, but implementation of the system may take longer and cost more than is currently anticipated. IOIS was scheduled for completion in mid 1996. As of July 1997, the system was not yet close to completion and no firm implementation schedule had been set. The original $2.4 million budget is essentially expended but only one of the five promised implementation phases has been completed. As a result, IOIS does not yet provide division and factory management with the information needed to monitor operations.

Background on the Industrial Operations Information System

In 1992, TCI contracted for a study to determine the feasibility of implementing an automated industrial operations system. In 1994, TDCJ issued a request for proposals (RFP) for this system. Three proposals were submitted. The winning proposal, submitted by IBM in June 1994, called for IBM AS/400 running business/manufacturing software from the J.D. Edwards Company. The proposal included application modules for customer order processing, master scheduling and material requirements planning, bill of material processing, inventory management, job costing, accounts receivable, purchasing, accounts payable, general ledger, bar code data collection, and maintenance management.

To date, only one implementation phase has been completed. The original plan called for five implementation phases:

- Sales Order/Accounts Receivable Processing
- Purchasing/Accounts Payable Processing
- Manufacturing Purchasing and Inventory Processing
- Manufacturing Work Order Processing
- Material Requirements Planning

Besides e-mail (which was already available on the Department network), only the sales order/accounts receivable module has been implemented. This module notifies factories of outside sales orders, notifies TCI headquarters of factory shipments, and generates sales invoices to customers.

Implementation of IOIS is late, and there is currently no firm completion date:

- Sales order/accounts receivables was originally scheduled to be implemented in December 1995. Instead it "went live" for external sales in May 1996 and, at the time of our audit, three factories were still not on the system. It does not yet accommodate departmental sales/invoicing.

- Manufacturing purchasing and inventory processing was originally scheduled for implementation in March 1996. As of June 1997, TCI had not completed the input of inventory data. This data is the first step to implementing this module.

- Purchasing/accounts payable processing was originally scheduled for June 1996 and is not yet complete. A deadline for completing Purchasing/Accounts Payable Processing was set for the end of the fiscal year 1997.

- The pilot site for full implementation, the Ellis Unit woodshop, was scheduled to be fully operational starting in September 1996, but it is not yet operational.

Because of continued delays and changes in project time frames, the project manager no longer attaches dates for implementation of the different modules at each factory. Instead, he lists only the relative order of implementation.

Delays in implementation have required modification of the scope of the project and have increased the project's cost. Modules for Maintenance Management and Capacity Requirements Planning have been deferred, and Bar Coding has been dropped completely. Not meeting original deadlines required TCI to extend its contracts with its project manager and programmer. These extensions cost an additional $74,000.

We attribute TCI's implementation difficulties to the following factors:

- <u>Inadequate planning and performance specifications for the system</u> - While the RFP specified various interface and hardware configurations, it did not fully describe the management and operational information the system would provide. In addition, the RFP was not based on a thorough understanding of factory operations. The RFP called for automation of data from incomplete manual systems, without first examining and improving those manual systems.

- <u>Noninvolvement of decision makers and stakeholders in development of the system</u> - Despite the need to transfer data to and from Department information systems for purchasing and financial reporting, development of TCI's system has occurred in relative isolation from the Department as a whole. TCI managers have not been active in specifying the financial information they expect from the system, and minimal input has been solicited from the factory managers and accountants who stand the most to gain from the system's implementation.

The system's status, capabilities, and long-term benefits have not been adequately communicated to factory personnel. We heard numerous, diverse complaints about the system during our factory visits and in interviews with factory accountants. For example:

- Only 10 of the 44 factories' accountants reported that they had an adequate understanding of the new system's capabilities.

- Few of the factory personnel we interviewed were aware that bar coding had been dropped from the contract.

- Inventory data returned to a factory by TCI headquarters had lost essential information on costs as well as manufacturer names needed to tell one item from another. Instead, screws of all types and sizes were listed simply as "screws."

- Because the system does not allow for insertion of additional written comments, it would not allow a factory to accommodate the customer's terms for a particular order.

- The system does not accommodate differences between internal and external customers; for example, though one order was departmental (internal price = $15), the pick-slip showed the external price ($20).

Not all of the factories surveyed have yet received training on the system. Of the 33 factories that had, one factory's staff received training over the phone and two others had received training only on the system's e-mail capabilities. One plant manager told us that the e-mail training he had received included wrong instructions for how to log onto the system.

- <u>Overreliance on contracted project manager</u> - The original contract called for TCI to designate an internal project manager, and in 1995 the Department's Data Services Division recommended assigning an ongoing system administrator. However, TCI contracted for an external project manager instead.

The initial selection of the contracted project manager appears to have been conducted at less than arm's-length. The project manager was also the author of the original feasibility study. In addition, had it not been for a discount for early signing, a different vendor would have been the low bidder. The project manager's contract has since been renewed, noncompetitively, as an information systems vendor.

Because TCI has relied on the contracted project manager, TCI employees lack his detailed knowledge about the system. As a result, TCI will be dependent on nonemployees until knowledge of the system can be transferred to its staff.

In addition, the contracted project manager lacks understanding of other Department initiatives. The Department has for some time been moving toward implementing a new purchasing system (ADPICS), which is compatible with the Department accounting system and will be required for all Department purchases. Almost one year after ADPICS was piloted, the TCI implementation team appeared to be unaware that the new system was being implemented and that the TCI system would need to be compatible with it. Had the project manager been from the Department's Data Services Division, this would more likely have been planned for in advance.

- <u>Use of the existing Department network rather than simple dial-up for data exchange</u> - Where the original feasibility study recommended simple dial-up as a means of transferring data from factories to TCI, the RFP contained a requirement that the system use the existing Department network. This imposed extensive cabling and other requirements.

<u>Recommendations</u>:

- Establish an internal project manager from the Department's Data Services Division or from TCI to complete knowledge transfer. This would decrease TCI's reliance on contracted assistance and help to ensure that TCI data management is consistent with overall Department policies, standards, and financial practices. Many of the weaknesses we have observed are organizational in nature—relating to the isolation of the system's development from the Department as a whole, TCI management, and factory-level personnel. The project manager's primary objective should be to ensure the timely and successful completion of the project through constant interaction with these parties.

  - Immediately involve senior and middle management in establishing expected system outputs. This will help to ensure that IOIS serves managerial as well as operational purposes. We encountered significant difficulties and delays in obtaining standard data, such as customer lists and receivables reports, from IOIS. That such reports were not readily available suggests that TCI management has not defined and communicated its informational needs and expectations to the IOIS implementation team.

  - Designate an implementation "owner" at each site, preferably the plant accountant. This will ensure that the system is appropriately tailored to meet the diverse needs of each TCI operation. Factory-level managers and accountants should become partners in the implementation effort; they also should be explicit in defining their information needs. Thus far, the system has not significantly reduced their workload.

- Establish and document appropriate system- and factory-level controls regarding access, authorizations, separation of duties, and physical security. The system's current fluid state did not allow for such a review during this project. The factory roll out process provides TCI with the opportunity to compare and assess factory-level controls, and to standardize and improve them.

Management's Responses:

- *Agree to implement recommendation. TCI has selected an internal project manager. Further, TCI will immediately set about involving senior managers to establish expected system outputs and develop an action plan.*

- *Agree to implement recommendation. TCI will establish an action team. The action team will develop the policy and procedures needed to implement the recommendation.*

Section 1-E:

TCI's Policies and Procedures Do Not Ensure That All Factories Implement Good Processes

TCI does not have a way to ensure that good processes for managing production and assets are implemented in all factories. In our visits to factories, we saw areas in which some factories had developed exemplary systems for tracking inventory and monitoring production, and others where similar systems could have been implemented had they been shared.

- **Production Planning** - Some but not all factories consider planned changes in products to be implemented in the next cycle when considering adjustments to reorder points for raw materials. Three factories do not calculate reorder points. Some factories trace back-order amounts and even report those amounts to TCI headquarters.

- **Inventory Management** - Some but not all factories include in their calculations of the reorder points what the vendors' minimum order quantities are. TCI has not provided factories with procedures for developing these reorder points. Other areas in which we saw variations include:

    - Nature, timing, and extent of spot checks of raw materials inventories and small tools
    - Adjustments to inventory records (discussed in Section 2-A)
    - The degree of segregation of duties among staff and inmates
    - Physical security of inventory

- **Management of Scrap and Salvage** - Some factories track their scrap materials and check with other factories to see if any will be useful. Others do not track scrap, and one even left potentially useful items exposed to the weather.

- **Security in the Factories -** Some factories control small sharp tools better than others. At one factory, tools were not being accounted for prior to releasing the inmates for lunch or at the end of the day. In addition, razor blades were observed lying on the floor during the tour of this factory.

- **Quality Assurance -** Processes for ensuring the quality of products varied. Some factories had no formal checks or procedures. Others had developed systems that allowed them to pinpoint patterns in defective work to a specific machine or even inmate. One factory had its quality review staff report to different supervisors than did the production staff. When production staff are responsible for quality review, they are less likely to report potential problems as this could reduce their productivity measures.

TCI has not developed policies or other mechanisms to ensure best practices are known or shared. In addition, TCI had few policies related to appropriate accounting procedures at the factory level and did not provide adequate instruction for the preparation of factory monthly reports. These reports are the basis for TCI's factory financial statements.

Recommendation:

Develop policies and procedures that would allow new employees to understand the minimum expectations for management of assets and resources. In addition, TCI should develop mechanisms whereby factories could share their best practices and people in similar roles in different plants could address common problems.

Management's Response:

Agree to implement recommendation. TCI will immediately begin semi-annual meetings with all Plant Managers and expand the usage of the TCI quarterly newsletter to accomplish the recommendation. TCI will also establish an action team to develop policies and procedures aimed at providing new employees an orientation period and at developing a component for the Quality Training curriculum to address minimum expectations for management of assets and resources.

Section 2:

Develop Useful, Reliable Information to Monitor Factory Financial Position

Available information on factory and division financial performance is not useful or accurate. TCI prepares monthly statements of profit and loss, but these statements are produced by a cost accounting system that does not adequately allocate costs to products. The resulting financial statements are used both internally and externally, but they are not reliable or accurate.

Other information available to monitor factory operations is also not useful. Specifically:

- TCI's funding is not linked to expected production and is split among three funding sources, which makes it difficult to assess overall financial performance.

- The operational reviews that TCI performs are not structured to ensure that significant weaknesses in factory controls are detected or corrected.

- TCI has not used available information to improve product quality.

The lack of sound information at TCI prevents management and other users from knowing how much it costs to produce items, whether factories are making or losing money, and the degree to which results are achieved. Unreliable cost information hinders management's ability to make decisions about factory efficiency, product prices, product lines, and other production issues.

Cost Accounting Information is Necessary to Make Sound Operational Decisions

Kinds of Decisions	Cost Accounting Information Required
1. Pricing a product	1. Costs of producing the product
2. Discontinuing a product	2. Costs saved
3. Making or buying component parts	3. Costs of making the part
4. Expanding production of an existing product	4. Additional costs due to expansion
5. Taking special orders at less than regular prices	5. Additional costs of the special order.

Source: *Managerial Accounting* by C. Engler, p. 184

Section 2-A:

TCI's Cost Accounting System Does Not Adequately Allocate Costs to Products

TCI's cost accounting system does not adequately allocate costs of production to individual products. TCI's system includes the cost analyses done at the factory level, its systems for tracking inventories, the calculation of overhead allocation rates, and the assignment of overhead to individual factories.

We found weaknesses in each of these components. (Appendix 4 provides detailed information about TCI's cost accounting system.) The weaknesses in TCI's system prevent TCI from accurately tracking its costs and making good decisions about pricing products, valuing inventory, and other operational issues.

- **Cost analyses are not complete or accurate.** Factories calculate the cost to produce individual products through "cost analyses." (Cost analyses are prepared for items sold through the General Services Commission catalog and for some custom-made items.) These cost analyses are submitted to TCI headquarters for consideration in the price-setting process. Therefore, inaccurate costs in the costs analyses could affect TCI's ability to make good decisions about reasonable product prices.

The following weaknesses in this process result in inaccurate cost analyses, and therefore, inaccurate data on which to base pricing decisions:

- Raw material costs used are not always the most current costs.

- Labor hours used in cost analyses are estimated, and industry standards or time studies are not used to verify the reasonableness of these estimates.

- All costs are not included.

- Overhead rates are sometimes intentionally changed, even when better estimates of overhead costs are known. As a result, some factories' cost analyses resulted in costs that were less than TCI knew them to be, and TCI lost information about what the different costs were of producing items at different factories.

- **TCI's method of allocating overhead to products has not ensured that these costs are covered.** Overhead includes those costs incurred in the production process which are not easily identifiable in the final product. TCI considers supervisory salaries and benefits; purchase, maintenance, and depreciation of equipment; supplies; small tools; utilities; travel; and the administrative expenses associated with TCI headquarters to be components of factory overhead. For fiscal year 1996, factory overhead totaled $29 million for all factories combined. Factory overhead must be allocated to products so that finished products include all costs associated with producing goods.

  TCI provides each factory with an overhead allocation rate at the beginning of each fiscal year. However, TCI's estimates are not always accurate, and there is no adjustment to ensure that all of the costs are eventually assigned to products. We determined that for one factory only 3.5 percent of the overhead it was charged was recovered through its sales prices.

- **Assignment of overhead to individual factories' financial statements has not been based on actual cost or adjusted to reflect actual costs.** Without accurate information about the costs of overhead at each plant, TCI cannot know whether or not a factory is profitable. In addition, it cannot make decisions on how to price its products, or whether to expand or discontinue a line of products.

  Through fiscal year 1996, the total amount of factory overhead attributed to each factory was based on estimates from 1992. Each factory was provided with the overhead amounts that would be attributed to it on its financial statements, and this amount was never adjusted to reflect actual expenses. As a result:

- There are no incentives for factories to control these costs.

- Changes in overhead expenses are not carried through to the profit and loss statements.

- Factory financial statements are not accurate or meaningful.

For example, the amount of the supplies attributed to one plant remained constant throughout fiscal years 1994, 1995, and 1996 even though its sales and its purchases of raw materials decreased significantly during that period.

Figure 1

Selected Items From the Year-End Financial Statements for Coffield Metal Fabrication Plant

Item	**Fiscal Year 1994**	**Fiscal Year 1995**	**Fiscal Year 1996**
Supplies expense	$134,423	$134,423	$134,423
Cost of Raw Materials	$2,006,360	$798,151	$807,607
Total Sales	$4,291,602	$1,417,979	$1,958,397
Supplies as a percentage of sales	**3.13%**	**9.48%**	**6.86%**

TCI has recently identified some of the actual fiscal year 1996 expenses for components of factory overhead, including salaries and cash expenditures. The actual amounts identified by TCI account for approximately two thirds of the total factory overhead. We used these revised figures to recalculate factories' fiscal year 1996 profits or losses. For nine factories, using actual overhead changed their "bottom line" profit or loss significantly (that is, their profit turned into a loss or their loss turned into a profit).

The effects of using these revised overhead amounts on the fiscal year 1996 factory financial statements are presented in Appendix 4-1.

- **Adjustments to inventory amounts are not consistent.** Inventory amounts on factory financial statements are adjusted to reflect raw materials damaged during production and to reflect differences, or variations, between inventory records and actual inventory counts. However, factories make these adjustments according to their own criteria. Therefore, factories' inventory amounts are not consistently presented on the financial statements, and factories' gross profit or loss is subject to manipulation.

- **TCI's methodology for pricing its products does not ensure that costs are covered.** Factories recommend prices based on their cost analyses, but TCI generally sets prices for catalog items at 10 percent less than competitors' prices. As a result, there is no guarantee that the prices charged cover the costs of production, either on an individual product basis or as a whole for the product line. In fact, we found cost analyses which show factories' production costs to be higher than the current price set for these items.

Prices are developed for non-catalog items in different ways at different factories. One factory we visited maintained detailed historic data and used it for pricing custom jobs specifically to ensure that costs were covered. (This factory did not use the overhead allocation rates required by TCI.) Other factories developed quotes for custom jobs based on analyses similar to a cost analysis. Still others used price lists which had been in effect for years. These factories did not have documentation to support how the prices on these price lists were calculated.

Recommendations:

- Cost analyses should include all costs incurred in production and should reflect the most recent prices paid for raw materials and TCI's best estimate of overhead associated with production. If labor hours are used to allocate overhead to the product, TCI should use realistic estimates of hours. TCI may find it useful to take advantage of published industry standards and time studies for these estimates.

- All overhead should be allocated to the individual products in the manner best suited to that industry to ensure that the costs of the product are assigned either to sales or to inventory. Inmate hours do not need to be the basis for allocating overhead at all factories. Instead, TCI headquarters should provide each factory with a reasonable estimate of how much total overhead will be incurred over the year, and the factory should then allocate it to products in whatever way seems to be most reasonable for that industry. TCI should provide guidance on how to allocate overhead to products (using such bases as inmate hours, machine usage, or standard direct hours). Each factory's methodology would need to be approved and reviewed by either the division director or by someone else at TCI, to ensure that if applied, estimated overhead would be fairly allocated.

- Actual costs should be included on a monthly basis in the financial statements for each of the factories. Estimates needed for timely decision-making should be updated as soon as actual expenses are known. Over the course of the year, TCI should compare overhead allocated to products with overhead actually incurred. Adjustments should be made for overhead over- or under-allocated.

- Criteria for when to make adjustments to inventory records should be developed to ensure consistency and fairness in reporting inventory amounts.

- Policies should be developed to ensure consistency in adjustments to inventory amounts.

- TCI should use cost information to determine prices and to make decisions on whether or not it is cheaper to make or to buy some items. In addition, if similar items are produced by different factories at different costs, TCI should use the information on these cost differences to make decisions related to equipment replacement, inmate supervision, and production scheduling to maximize financial and other results for TCI as a whole.

Management's Responses:

- *Agree to implement recommendation. TCI will establish an action team to research and evaluate different methodologies for implementing the recommendation. Once research and evaluation have been completed, the action team will develop policies and procedures for implementation.*

- *Agree to implement recommendation. TCI will select action team members to develop criteria for allocating overhead. Additionally, policies and procedures will be developed to address the issues in the recommendation.*

- *Agree to implement recommendation. TCI will establish an action team to develop the policies and procedures needed to implement this recommendation.*

- *Agree with recommendation. TCI will establish an action team composed of Division and Plant Managers who will develop policies and procedures based on the JDE system.*

- *Agree to implement recommendation. TCI will establish an action team composed of Division and Plant Managers who will develop policies and procedures based on the JDE system. This recommendation will be conjunction with 2-A. (4).*

- *Agree to implement recommendation with modification. TCI has a statutory obligation to provide offenders with on-the-job training. In order to comply with statutory obligation, it may be necessary to have offenders produce items that may be purchased at a lesser price. TCI will develop an action team which includes representatives from Financial Operations and Fixed Assets. The action team will research and evaluate different cost allocation methodologies.*

Section 2-B:

Factory Financial Statements Are Inaccurate

TCI's financial statements do not recognize costs or revenues appropriately, and, as a result, management does not have sound information about amounts of sales, costs of goods manufactured or sold, or whether a factory is making or losing money. Moreover, TCI's financial reporting practices may disguise Department subsidies to other agencies. Inaccuracies in the financial statements are magnified by the inaccuracies in TCI's cost system.

As is common in manufacturing enterprises, TCI prepares two basic financial statements for each of its factories:

- The Manufacturing Statement includes the direct and indirect costs for goods produced during a given period.
- The Income Statement compares sales with the cost of those sales and includes a "bottom line" profit or loss.

TCI's financial statements are used both internally and externally as indicators of divisional and factory success. Some TCI managers use these financial statements to make decisions on how to change factory operations, improve the financial status of individual factories, and evaluate plant managers' performance. However, other TCI managers reported that they do not use these financial statements because they know them to be unreliable.

These financial statements are distributed to external users, including Department management, legislative entities, and others. These users may not be aware of the assumptions used in preparing the financial statements or the resulting limitations and inaccuracies in the statements. Therefore, these users may inappropriately rely on TCI's financial statements.

Appendix 5 provides detailed information on the inaccuracies in TCI's financial statements. These include:

- **The Cost of Goods Manufactured figure on the Manufacturing Statement is not accurate.** Cost of Goods Manufactured is calculated by adding the Cost of Raw Materials to the allocated overhead for the period.[1]

  The Cost of Goods Manufactured is the "bottom line" on a manufacturing statement, and is necessary for calculating net profit or loss on the income statement.

  TCI's financial statements do not include accurate figures for either the Cost of Raw Materials or for overhead:

  - TCI's method for calculating the Cost of Raw Materials can result in significant understated costs which, in turn, can understate the Cost of Goods Manufactured and overstate gross profits.

---

[1]Typically, a manufacturing statement also includes the costs for direct labor. However, at TCI, inmates are not paid for their labor, and supervision of inmates is considered to be overhead. Therefore, there are no direct labor costs included.

- As discussed in Section 2-A of this report, overhead amounts are based on estimates. These estimates are not compared to actual overhead expenses.

Because neither the Cost of Raw Materials nor the allocated overhead is accurate, the Cost of Goods Manufactured cannot be accurate. This means that the Income Statement's Cost of Good Sold will not be accurate, and the reported net profit or loss will also be inaccurate.

- **The Departmental Sales figure on the Income Statement is not accurate.** TCI includes inter-factory transfers as departmental sales. Also, the calculation of Net Departmental Sales includes adjustments that make the figure inaccurate. These conditions misstate departmental sales and affect TCI's calculation of net profit or loss on the Income Statement.

- **TCI's financial reporting practices may disguise Department subsidies to other agencies.** TCI reduces factory losses by the amount of profits that TCI attributes to sales to the Department. In this way, TCI applies departmental profits to defray the losses TCI incurred in preparing goods for other agencies. Ten of TCI's 44 factories defrayed losses on outside sales by adding back the profit made on departmental sales, for a recorded total of $2.1 million. However, because the financial statements are inaccurate, we cannot determine the true amount of losses that Department has absorbed from outside sales.

Recommendations:

- Sales of necessity items to the Department should be recorded as sales (perhaps less a discount to eliminate the profit), but transfers of one factory's finished goods to another factory's raw materials should be recorded as inter-factory transfers. Only sales of finished goods to someone outside TCI should be recorded as sales.

- The Cost of Raw Materials should be computed according to standard accounting procedures (Beginning Inventory plus Purchases less Ending Inventory). The resulting amount should be used in the calculation of the Cost of Goods Manufactured. If there is a difference between the Cost of Raw Materials computed according to standard cost accounting procedures and those reflected by accruing information from factory work orders, the difference should be reconciled.

- Once TCI has recomputed the amount of the costs associated with Departmental Sales it should:

  - Consider raising prices on the products that incurred a loss on departmental sales.

- Recompute the amount by which the Department is subsidizing sales to other agencies. The Department should only subsidize other agencies to the extent that some identifiable benefit is obtained. For example, it may be a strategic decision to sell some products for less than cost if an identifiable pool of inmates has received job training through a program to reduce recidivism.

- The Department may want to consider hiring a Certified Public Accountant, either on staff or as a contract employee, to help TCI address some of these issues. While there is no requirement that TCI produce financial statements in accordance with Generally Accepted Accounting Principles (GAAP), GAAP does address some of these issues and GAAP treatment might prove useful to TCI.

Management's Responses:

- *Agree to implement recommendation. TCI will appoint an action team to address method to achieve the implementation of this recommendation. The action team will develop an action plan.*

- *Agree to implement recommendation. TCI will have an action team review the process and develop policies and procedures to implement this recommendation.*

- *Agree to implement recommendation. TCI will establish an action team to research and evaluate the different type of factories, programs and products and how to best implement this recommendation. The action team will formulate policies and procedures that are needed.*

- *Agree to implement recommendation. TCI will work with Financial Operations and Contract Purchasing to develop a Request for Proposal (RFP) to hire a CPA on retainer.*

Section 2-C:

TCI's Funding Is Not Linked to Production and Is Not Structured to Facilitate Monitoring

TCI funding for sales to the Department is not tied to production. These "departmental sales" are funded from a strategy different from the strategy used to fund "outside

TCI's Funding Structure

TCI receives funding from three of the Department's strategies:

- Goods sold to "outsiders" are accounted for through a revolving fund, which is expected to be self-supporting, and which is included in the Department's appropriation as Strategy C.2.1 "On-the-job Training." The General Appropriations Act estimated fiscal year 1997 revolving fund receipts at $63.5 million.
- Goods produced for the Department's use are accounted for through Strategy C.1.2 "Institution Goods/Service." In fiscal year 1997, this strategy includes the $18.6 million allocated to TCI, as well as an additional $290 million that is used for Agriculture, Food Service, and others.
- Goods produced for the Department's State Jail Division are treated like "outside sales" but are funded through the Department's Strategy C.4.1 "State Jail Facilities." Of the $224 million appropriated to this strategy for fiscal year 1997, TCI was budgeted $1.9 million.

sales" (sales to other state and local government units). This makes it difficult to monitor individual factory budgets, and impossible to monitor overall TCI financial performance through the Uniform Statewide Accounting System (USAS).

- **Funding for Departmental Sales is not tied to production.** TCI is responsible for producing goods (such as clothing, bedding, and shoes) used in prison units by inmates and security. TCI receives a lump-sum allocation from the Department to cover those items. This money, $18.6 million in fiscal year 1997, is made available to TCI, but is not tied to the specific production of identifiable items. This allocation was based on TCI's estimate of what it would cost to produce necessity items for the Department.

  However, TCI is not obligated to produce specific numbers of units. As a result, if the Department's need is less than projected, it will overpay for items and the funds allocated to TCI will subsidize sales to other agencies.

- **The budget status reports that TCI provides to its divisions and factories mirror the separate funding streams, and budgeting occurs from three separate strategies.** As a result, TCI budget status reports do not provide meaningful information with which to monitor factory budgets. Budget information is not consolidated for each factory and does not necessarily reflect only actual expenditures or obligations.

  - Budget reports present information only by factory and by funding source. TCI management obtains budget status reports from the Department's financial accounting system (Lonestars). Separate reports are generated for each factory and for each factory's funding source. Therefore, if a factory receives appropriated, state jail, and revolving funds, there are three separate budget reports related to that factory that must be reviewed to determine how revenues and expenditures align with budgeted amounts. TCI does not consolidate these reports into a single spreadsheet to facilitate analysis and monitoring. In fact, until June 1997, budget status reports were available to TCI's five division managers only on a quarterly basis and were not available to plant managers. Without timely information organized in a useful format, TCI cannot adequately monitor factory financial status.

- Budget reports often include "pre-encumbrances" which can overstate the expenditure side of the budget report. Pre-encumbrances are entered into Lonestars for the amount of blanket purchase orders awarded by the Department. These amounts usually far exceed the actual amounts TCI expects to spend and does spend against the blanket purchase order. This overstates the expenses reported on the budget monitoring report and clouds the true financial picture of a factory's expenses. In fact, toward the end of the third quarter of the fiscal year, TCI's chief accountant has to ask each factory how much money will not be spent by the end of the fiscal year so that he can reallocate available funds to other factories.

In addition, TCI allocates its appropriations among its factories based on historical budget amounts. The allocated amount is not analyzed to ensure that the dollars are truly needed to meet planned goals and projected activity levels. For example, the fiscal year 1997 factory budgets were the same as the fiscal year 1996 budgets even though many factories significantly overspent or underspent their 1996 budgets.

- **TCI's financial position cannot be tracked through USAS.** USAS tracks revenues and expenditures by strategy and fund. Therefore, the revolving fund's activity, including vendor and object of expense, can be tracked from the state level. This is not true of TCI's other appropriated funds, because the strategies which track these funds include so many other items.

  While USAS can currently track revolving fund activity, the financial picture viewed is inaccurate. TCI has not used the revolving fund solely for external sales activity. For example, according to TCI management and Department management, approximately $900,000 of salaries for the Department's Transportation and Warehouse drivers are paid for from TCI's revolving fund. Other TCI employees who work solely at factories that make goods for the Department's internal use are also paid from the revolving fund. These types of transactions prevent users from having accurate information to match external sales revenue against external sales expenses and determine the financial position of the revolving fund.

<u>Recommendations</u>:

- The Department should allocate funds for "necessity items" to TCI based on an agreement to provide specific numbers of individual items over the course of the year and based on a specific price list. As items are produced, the Department could transfer the agreed-upon money to the revolving fund. (Alternatively, to alleviate cash flow problems for TCI, the Department may want to prepay for some of these items, and as the items are produced and shipped to the units, the Department's prepayment would be appropriately debited.) Adjustments to the number of items to be produced could be made periodically.

In 1991, TCI management agreed to a Department internal audit recommendation to consolidate general revenue funding into the industrial revolving fund. This recommendation was repeated in 1994 by the Office of the Comptroller of Public Accounts. Implementing this recommendation would allow TCI to operate strictly from the revolving fund, making it easier to track operations from a statewide level. In addition, because only one funding stream would be involved, there would be no need for separate budget reports for appropriated and revolving funds, and it would be easier to track budgets within TCI.

- Budget status reports should mirror the actual expenditures and obligations as closely as possible. As a result, we recommend that the pre-encumbrances not be included in the reports made available to factories.

- Funds from all sources should be allocated to the different factories based on what they are likely to need for the period. Prior year actual numbers should be considered in the development of subsequent year's budgets.

Management's Responses:

- *Agree to implement recommendation. TCI initiated action on this recommendation due to the same recommendation appearing in the TDCJ Internal Audit. The action plan calls for an implementation date of September 1, 1998.*

- *Agree with recommendation. TCI will not include pre-encumbrances in reports made available to factories.*

- *Agree to implement recommendation. TCI will perform budget exercises involving division and factory level management. These exercises will occur annually and quarterly, to assure that all funds are properly allocated. Detailed summaries of expenditures by FY, quarter and month will be made available to division and factory level management staff.*

Section 2-D:

Operational Reviews Provide Limited Information on Factory Performance

TCI's reviews of factory operations are not structured to ensure that significant problems are detected and corrected. TCI division managers conduct biennial operational reviews of each factory within their divisions. These reviews are intended to evaluate factory administration, including inventory, security, maintenance, safety and health, production, and environment. However, these reviews:

- Are not scheduled or expanded based on risk factors associated with each factory
- Are not structured to ensure that the most important areas are thoroughly reviewed
- Do not include a formal mechanism to ensure that identified problems are addressed

As a result, weaknesses in factory operations and controls have not been detected or corrected.

Reviews are not scheduled based on known risk. Two of the factories where we found the most significant problems had not had an operational review since the fall of 1995. One of these had been identified by TCI staff as a factory that consistently had problems managing its inventory. Even so, there was no attempt to review that factory more frequently than scheduled.

Reviews are not structured to ensure that problems are identified. The reviews are conducted according to a checklist that does not include criteria or procedures. For example, the review will ask whether fixed assets are properly accounted for, but does not provide criteria (such as "all tested items had an inventory tag that traced back to the central accounting fixed asset list") or procedures (such as "obtain a fixed asset list, select a sample of 10 items from the floor and make sure that they are all where the list says that the should be.") to ensure consistency among reviewers, sufficiency of coverage, or accuracy of conclusions. In addition, there were areas that we identified as high-risk areas that were not included in the reviews, such as the cost analysis process and the pricing of custom orders and employee sales. As a result, the operational reviews are not good mechanisms to monitor factory compliance with policies or the sufficiency of controls.

For example, two of the factories we visited had operational reviews within the past six months. TCI's operational reviews did not identify most of the significant problems that we noted in our reviews. At one of these factories, the operational review had noted that the monthly reports were both late and "insufficient." Our review found that variations and impairments were not adequately explained or supported and that there were significant amounts of obsolete inventory. At another factory, the operational review noted that there were not enough inmates assigned to the factory, and that there was an outstanding work request. Our review of this factory noted numerous problems with inventory records, obsolete inventory, and unaddressed customer complaints.

There is no process to ensure that identified problems are addressed. For example, a 1991 internal audit report recommended that one factory dispose of obsolete materials. These items were still in inventory as of our review in June 1997. In addition, an operational review dated February 25, 1997, noted that the plant warehouse did not have doors. A work request had been submitted in December 1993, but the request was still open at the time of TCI's review.

Recommendation:

The Operational Review Process should be evaluated and enhanced with procedures to ensure that significant weaknesses are discovered and addressed. Specifically:

- The reviewers should be independent of the division, plant, and unit. This could be done by having division managers or assistant managers from one division review factories in another division.
- Develop criteria and procedures to ensure that divisional reviews are more likely to identify significant problems.
- Use risk assessment to determine the nature, timing, and extent of monitoring.
- Provide instruction on how to test factory performance for items currently included in the review. Reviewers should receive training on how to conduct the reviews, what "red flags" to look for, and how to write an effective report of their findings.
- In addition to the areas currently reviewed, expand the operational reviews to include review of:
  - Pricing of custom orders
  - Cost analysis processes
- The results of these reviews should be used in evaluating plant managers.

Management's Response:

Agree to implement recommendation. TCI will develop an internal compliance review. TCI will submit a decision memorandum for the establishment and funding of staff to perform compliance reviews.

Section 2-E:

Available Information Should Be Used to Improve Product Quality

Customer complaints are the primary mechanism that TCI uses for ensuring quality of its products. However, TCI does not know about all the complaints received by the factories, does not ensure that all complaints are addressed, and has not used available information to improve product quality. While TCI has a quality assurance program, this program is still primarily a training program. Plans for future phases will include more emphasis on developing processes for ensuring product quality.

- **Customer input is not used to improve business processes.** TCI headquarters receives some customer complaints, but some go only to the factories. In addition, TCI's tracking mechanism does not ensure that all complaints are resolved:

  - Not all complaints are monitored by TCI. Two of the six factories we visited received complaints directly. TCI does not receive information concerning the complaints for these factories. TCI Industry Policy No. 9.03.002 states that incoming complaints may be received through various channels, but <u>all</u> complaints must be directed to and routed through TCI's Customer Service Department. However, the two factories that we reviewed neither forwarded information to TCI nor maintained sufficient documentation of these complaints to determine whether they were satisfactorily resolved.

  - TCI's tracking of customer complaints has not ensured that all complaints are resolved. TCI lists customer complaints received at headquarters in a customer complaint log, and forwards information on these complaints to the factory for resolution. However, TCI has not ensured that factories resolve these complaints. As of May 30, 1997, the log for fiscal year 1997 included 994 customer complaints, of which 380 did not reflect resolution. Some of these unresolved complaints were from September 1996, the start of the fiscal year. In addition, one complaint from March 1997 was listed as resolved, but was not.

    Four of the six factories we visited had received complaints referred from TCI headquarters. Two did not ensure that complaints were resolved in a timely manner, or that they complied with TCI policy. If TCI policy were followed, there would be written justification if a complaint were not resolved within 22 working days. However:

    - At one factory, 4 of 13 complaints had not been resolved. Three were over one month old, and the other was four months old. One complaint concerning a warped product also noted that the product received by the customer had another agency's state property tag attached.

    - At another factory, 2 of 14 complaints had not been resolved. One was 3 months old and the other was almost 8 months old.

    None of these complaints included written justification explaining why they were still unresolved.

- **TCI has not used available information to improve product quality.** Neither customer complaints nor other data is used to ensure that action is taken to improve production process:

- Customer complaints are not analyzed to identify trends related to factory processes, and TCI does not make changes to business processes to prevent future complaints. Although TCI tallies the number of complaints it receives and reports the number attributed to customer error, damaged merchandise, shipping errors, incorrect manufacture, or "miscellaneous," it does not track or address the underlying causes of these complaints. Detailed information with which to analyze complaints' causes is available from the Customer Complaint Forms, and TCI policy instructs factory management to use customer complaints to identify problems with products. Preventive action is to be documented and kept on file at the factory.

  However, our review of factory documentation suggests that preventive or corrective action had not been taken, since the same complaints were made by different customers at different times. In one case, the customer complained that TCI's replacement for a defective product included the same defect as the original.

- Several years ago, TCI conducted a customer survey, but the results were never formally analyzed. Surveys and pre-delivery questionnaires were sent to customers along with the delivery ticket for outside sales products. TCI never analyzed the results of this survey, although the response rate was reportedly high enough to provide reliable results.

■ **TCI does not have an effective Quality Assurance Program to ensure factories develop efficient and effective processes.**

TCI has begun to implement a division-wide quality assurance program. However, the program has focused only on providing training to TCI staff on what quality is and on teaching various interactive skills for problem-solving. The quality assurance program is not designed to review the quality of products at factories or to develop procedures for factories to improve the quality of their products. Actual day-to-day quality control is the responsibility of individual plant managers.

Thirty-four of 38 factories we surveyed reported attending TCI's quality assurance training within the last two years. Of these 38 factories, 29 (or 76 percent) report having made changes to their processes as a result of the training. Specific changes cited include adding check points throughout the production process to more vague changes such as "more motivation."

TCI policy requires that each factory develop a set of quality standards and manufacturing instructions for each product. However, only 27 of 44 factories (or 61 percent) reported having any documented quality control standards. Factories are to document production techniques for ensuring product quality, adherence to standards, and promptly addressing causes of problems. We did not test the extent to which factory procedures complied with TCI's requirements.

Although the Quality Assurance Program does not focus on product quality, there are other mechanisms available that some plant managers are using to share best practices and to overcome common problems. For example, the Garment Division has monthly Quality Team meetings at which representatives from each Garment Division factory discuss issues such as customer complaints, production problems, new products and reporting mechanisms, and the results of division-specific training.

- **Difficulties in obtaining customer lists hampered our efforts in surveying customers.** However, the results of our customer surveys could still be useful in improving business processes. As mentioned previously, TCI does not have accurate information about who its customers are. While we were eventually able to obtain customer lists from the Department's central accounting system, these lists did not include sufficient data to group customers by products purchased, type of customer (such as a state agency or school district), or other useful groupings. Therefore, we used our judgement to select a sample of customers to survey.

  We sent 186 customers surveys about their satisfaction with TCI's quality, delivery, and service; about their impressions of trends in TCI service; and about specific past purchases from TCI. Eighty-three customers (or 44.6 percent of those surveyed) responded to our surveys. Although not statistically valid, our survey yielded information which TCI could use to identify strengths and potential problem areas.

  Appendix 6 presents the survey instrument we used and more detailed survey responses.

Recommendations:

- TCI should use customer input to evaluate and enhance business operations. The underlying causes of the complaints should be tracked. Trends can be used as a tool to monitor and correct problems at the factories.
- TCI's Industry Policy for the customer complaint process should be enforced to ensure compliance at all levels. Plant Managers should be accountable for the timely and satisfactory resolution of customer complaints.
- TCI's customer data should be reviewed and verified for accuracy and completeness. This could be accomplished by sending an information form to the customer with his or her invoice, calling the customers, or verifying information when customers call in to place an order.
- TCI should develop and implement policies and procedures that would address customer satisfaction at the "front-end" of the business process rather than after a complaint is filed. One way to do that would be through the use and analysis of customer surveys.

- Division management should monitor and evaluate the effectiveness of the production and quality processes. Measures should be developed and tracked to allow management to evaluate the effectiveness of the Quality Assurance Program. Alternative mechanisms to enhance the quality of TCI products (such as division quality teams or the specific training of inmates) should be used to supplement the training provided by the Quality Assurance Program.

Management's Responses:

- *Agree with recommendation. TCI will establish an action team to review existing policy and revise as needed.*
- *Agree to implement recommendation. TCI will establish an action team to review existing policy and revise as needed.*
- *Agree to implement recommendation. TCI will establish an action team to review customer data and develop the policies and procedures needed to implement this recommendation.*
- *Agree to implement recommendation. TCI will establish a study group to prepare a decision memorandum for the staffing of a customer service group.*
- *Agree to implement recommendation. TCI will utilize compliance review team to be established by recommendation 2-D. (1) for the implementation of this recommendation.*

Section 3:

Enhance Controls Over TCI Resources

TCI does not have sufficient controls to protect inventories, to ensure that customers with overdue receivables are not granted additional credit, or to ensure that sales to employee are conducted at arm's length. The lack of sound information about inventories and receivables increases the risk that these assets could be misappropriated.

Section 3-A:

TCI Does Not Have Adequate Information or Controls to Protect and Track Inventory

TCI has not ensured that all factories have sufficient controls or information to protect and track inventory. Neither TCI headquarters nor factories have accurate information about the inventory quantities that should be on hand. Factories typically do not research or resolve differences between actual and book inventories but instead simply adjust their inventory records to match the results of periodic inventory counts. In addition, TCI's method of reporting of inventory variances is misleading. Inaccurate information about inventories affects TCI's calculation of costs of goods and increases the risk that inventory items could be lost or stolen without detection.

TCI expects factory managers to develop and maintain sound controls over their raw materials, consumables, and finished goods inventories. Together, these inventories totaled $24.2 million at the end of fiscal year 1996. Total net inventory variations reported by all factories for fiscal year 1996 were negative $873,865 (that is, inventory shortages exceeded inventory overages by $873,865).

Weaknesses in TCI's inventory management include:

- **Not all factories have accurate or useful information to make decisions related to inventories.** Factories do not consistently record variations between inventory records and actual inventory on hand (via inventory counts) or attempt to identify causes of variations. In addition, factories report variances as a "net" figure by combining inventory shortages with inventory overages. This reporting practice masks significant losses of individual inventory items and also prevents management from identifying problems in accounting controls or warehouse reporting procedures.

  We found numerous variations between factories' inventory records and actual, physical inventory in our factory visits. Variations were significant at three of the six factories we visited:

  - At one factory, 22 of the 24 items we tested had differences between the amount of inventory on hand and the amount of inventory in the accounting records. The total amount of variations from the inventory records (both over and under) amounted to $66,426. This represents a 216 percent difference between the actual and recorded amounts.

    This plant was already using TCI's new information system for its inventory tracking. Therefore, we question whether problems related to the accuracy of inventory information will be fully addressed by the implementation of a new system.

  - At another factory, 11 of the 24 raw material items and 16 of the 26 finished good items tested had discrepancies. Raw material variances totaled $2,929 or 8 percent of tested inventories. Finished goods variances totaled $3,278 or 15 percent of tested inventories.

  - Another factory had 149 pages of variations resulting from the physical inventory conducted at the end of the fiscal year. Total variations (both over and under) amounted to $214,233.

The variations we found could not be accounted for even after searching through factories' unrecorded purchases or uses of inventory.[2]

TCI's variations result from different factors:

- Some factories lack physical controls to protect inventories from theft, misuse, or the elements. Two of the six factories we visited did not have adequate storage facilities to protect inventories. For example, at one plant, an estimated 8 percent ($24,000) of the $300,000 of lumber and plywood stored in an outside storage facility was damaged and unusable. The open-aired storage facility has dirt floors, no walls, leaks in the roof, and cannot be locked. At another plant, approximately $186,000 of raw materials was not secure enough to prevent small animals from getting into the storage area and soiling some of the materials. The storage area was located inside a warehouse with fencing surrounding the materials, but the warehouse did not have doors.

- Many plants lacked proper segregation of duties. The lack of segregation of duties compromises the plants' ability to safeguard inventory. The plants operate with a limited number of TCI employees, but compensating controls have not been implemented. 22 of 38 plants surveyed (58 percent) did not have adequate segregation of duties or compensating controls over their inventory management process. The Plant Accountant and Warehouse Supervisor at some plants are involved in the purchasing, receipt, adjustments, and spot counting of inventory and the invoicing of orders.

- Some factories are not properly accounting for materials issued for production. TCI policy No. 9.13.008 requires factories complete a standard form whenever inventory is issued from the warehouse for production. Each form must identify the work order for which the inventory items are to be used and are to be turned into the plant's office daily to allow timely posting of inventory use to the inventory records. However, some factories pulled items from stock without identifying the work order the inventory was to be use for or without providing the documentation needed to update the inventory records. As a result, the inventory records overstated the inventory on hand, and factory staff could not track inventory usage to work orders.

---

[2] Thirty-three of TCI's 44 factories use a manual system to track inventories. In these manual systems, inventory quantities for each raw material, consumable, or finished good are recorded on a "stock card" that must be updated every time new inventory is purchased or is used in production. This process can be time-consuming, and, as a result, inventory records are not always up-to-date.

- Some factories do not adequately test inventory on hand. TCI policy No. 9.13.010 requires all plants to conduct monthly inventory spot checks so that all items are counted at least once during the fiscal year. Several of the plants we visited were not conducting these spot-checks as often as required or often enough to provide relevant information about inventory on-hand. One plant we visited had not conducted a physical inventory of some raw materials received from another plant. Instead, it used the balances from the transferring plant as its beginning balances.

- TCI headquarters does not provide sufficient oversight of factories' inventory management. The operational reviews conducted by TCI management did not document the weaknesses that we found at the plants we visited. TCI does not analyze or perform reasonableness tests for inventory. The plants' monthly reports contain the necessary information, but no one performs these comparisons.

TCI does not have a policy for the reconciliation of discrepancies between inventory records and actual counts. As a result, factories did not consistently adjust inventory records to match counts. For example, one factory tested 37 inventory items and found discrepancies between the counts and the records in 5 of these. However, the records for only one of the items were adjusted to match the physical count. This item was not the item that showed the greatest variation or had the greatest value.

• **Some factories do not have good methods to determine when to order additional raw materials.** Each plant is responsible for monitoring its stock levels and establishing reorder points. However, most plants have not established or just recently established minimum and maximum order points for inventory items. Even when reorder points have been established, some plants do not use them to monitor inventory due to delays in manual posting to stock cards. At one plant, the staff members "eye" inventory levels to determine if an item is low and should be reordered. This increases the opportunity for inventory to be overstocked or out of stock. Out of stock on some inventory items could lead to downtime and loss of customer orders, and overstocking can result in obsolete inventory.

• **The lack of an effective management system to accurately track and monitor inventory has led to large quantities and dollar amounts of obsolete inventory on the books.** The obsolete inventory must eventually be written off or sold through auction or bid. This can result in a large loss for some plants. Some of the plant managers were aware of these figures, while others had no idea what amount of obsolete inventory they were maintaining. For example:

- Three years ago one factory sold off its obsolete inventory. Nonetheless, an estimated $274,247 of the $537,454 (51 percent) of current parts inventory at this plant was deemed to be obsolete. Most of this amount consisted of small value parts less of than $100.

- Another plant had approximately $29,000 of inventory that had no activity within the last year. Included in this amount was old fabric and twenty-year-old buttons. A 1991 Department internal audit report recommended that the plant dispose of the fabric.

Obsolete inventory takes up space that could be used for other needed inventory items. It also requires staff time to count, track, and monitor the inventory. TCI policy No. 9.01.009 on sale of scrap and salvage materials explains the State Purchasing and General Services Commission's process and forms. However, the policy does not provide guidelines to plant managers as to when obsolete inventory should be disposed of or the proper TCI procedures for disposal. The lack of these procedures can result in the accumulation of obsolete inventory.

Recommendations:

- Division management should review inventory storage facilities at all plants to identify needed repairs or improvements. If resources are unavailable to address deficiencies immediately, inventories should be moved to a more secure location.

- Each plant should ensure adequate segregation of duties among personnel responsible for accounting, purchasing, record keeping, and custody of stock. Posting to inventory records and reconciliation of inventory should also be performed by different personnel.

- TCI should develop procedures for the reconciliation of discrepancies between inventory records and actual counts. These procedures should include guidelines on what is to be considered a variation, and criteria for adjusting records. Variations should be reported as inventory shortages and inventory overages. In addition, the procedures should detail how physical counts and spot counts are to be conducted. Management should be held accountable for inventory variances.

- Policies and procedures should be developed and implemented for obsolete inventory. These policies and procedures should include guidance on how to dispose of inventory. Plants should be required to track and monitor obsolete inventory separately. Consideration should be given to recouping some of the cost of obsolete items through a mark-up on some products' prices.

Management's Responses:

- *Agree to implement recommendation. TCI will continue to utilize existing TDCJ policy and procedures. TCI will develop an internal policy and procedure to address repair and construction issues that are not addressed within twelve months of reporting under TDCJ policy and procedures.*

- *Agree to implement recommendation. TCI will utilize compliance review team to be established by recommendation 2-D. (1) for the implementation of compensating controls.*

- *Agree to implement recommendation. TCI will establish an action team to develop policies and procedures to implement recommendation.*

- *Agree to implement recommendation. TCI will appoint an action team to develop policies and procedures on the disposal of inventory.*

Section 3-B:

Credit Should Not be Extended to Customers With Past-Due Balances

TCI has failed to establish written procedures that specifically address the initial extension of credit or the collection of past-due amounts. As a result, TCI has continued to ship goods to customers with outstanding past-due balances. For example, as of June 1, 1997:

- One customer had $13,150 in receivables outstanding 120 days or more. These receivables resulted from orders shipped in June and July 1996. Nevertheless, TCI shipped $26,737 worth of goods to the customer in May 1997.

- Another customer had $41,255 of receivables 120 days past due resulting from orders shipped in January 1997. These outstanding balances did not prevent TCI from shipping another $19,101 of goods in May 1997.

In February 1997, the Department's Internal Audit Department found that TCI's revolving fund had $3.5 million in accounts receivables over 90 days past due (or 41 percent of the total $8.5 million due). As of June 1, 1997, receivables outstanding beyond 90 days had been reduced to $2.3 million (or 34 percent of the total $6.6 million due). However, while the percentage of past-due receivables has been reduced, TCI has not taken sufficient measures to prevent future collection problems.

Figure 2 shows the number of customers and dollar amount of receivables past due 120 or more days (as of June 1, 1997).

Figure 2

	Number of Customers	Amount of Receivables
120+ Days Past Due	182	$1,978,586
Total Receivables	619	$6,643,903

TCI drafted a policy to document and improve collection efforts. This policy was effective August 15, 1997, and includes specific guidelines and time frames for invoicing and collection. The draft policy requires that if payment has not been received within 90 days, TCI will send a collection letter stating that TCI will not continue to do business with the customer until all overdue payments have been received. However, the policy does not include procedures for identifying or rejecting orders from customers with delinquent accounts.

Problems in collecting receivables have affected TCI's ability to pay its outstanding liabilities. According to the Department's internal audit report, TCI had $1.9 million in outstanding payables as of February 1997. Of this amount, $1.56 million had not been paid within 30 days as required by statute and was therefore overdue. TCI does not have a written policy for determining which vendors to pay first. As a result, certain vendors might receive preferential treatment.

Recommendations:

- TCI should implement its draft policy on collection of accounts receivables. This policy should be revised to include procedures for identifying or rejecting orders from customers with delinquent accounts.

- TCI should develop a policy to address the monitoring and payment of outstanding revolving fund payables. Criteria for setting priorities for payment should be included in the policy.

Management's Responses:

- *Agree to implement recommendation with modifications. TCI will implement policy 09.13.000 as planned. However, rather than amend the policy, TCI will include this as part of the customer data review (recommendation 2-E. {3}) or develop a policy which addresses this issue independently.*

- *Agree to implement recommendation. TCI will develop a policy as recommended.*

Section 3-C:

Employee Sales Risk Negative Publicity

Although sales to employees do not account for a large percentage of TCI's sales, the risk that employees may take advantage of their position has not been sufficiently managed by TCI's policy on employee sales or by its implementation. TCI's policy on sales to employees does not adequately ensure that these sales are conducted at arm's length. The policy does not clearly define who is eligible to make purchases, or what specific products are to be excluded from employee sales. In addition, TCI has not consistently implemented its policy related to employee sales. Specifically:

- TCI policy requires that "sales will be priced at actual raw material used, plus factory overhead." However, many of the sales we reviewed did not include sufficient documentation to determine the basis for pricing. Only 17 of 28 sales files contained a cost analysis, price list, or invoice worksheet to support the price charged.

- TCI policy states that "when payment is received, the goods can be picked up." However, TCI does not always require payment before employees receive their goods. For example, TCI's accounts receivable aging report (as of June 1, 1997) includes 227 employee sales totaling $14,240 for which no payment had been received. Had TCI required payment before delivery, these outstanding receivables would not exist.

- TCI policy relates to sales of TCI goods to "members of the Legislature and Texas Department of Criminal Justice employees for personal use." However, employee sales at one garment factory were primarily to The University of Texas Medical Branch at Galveston medical staff, who are not Department employees and who do not appear eligible to purchase products from TCI. In addition, some sales were for items that suggest business rather than personal use, such as sequential house numbers and a sign listing fishing rules and catch limits.

- Policy specifically excludes from employee sales "body work or paint jobs on cars or trucks or equipment." However, there were three employee sales at one factory for this kind of work.

- TCI policy states that "the completed form with all approvals . . . will be received at the factory before production begins." However, we found that 8 of 51 sales files did not include the required authorization.

<u>Recommendations</u>:

- Specific policies and procedures should be developed and instituted that delineate who is considered an employee for the purpose of employee sales, what constitutes personal use, and what specific products are permitted and/or prohibited.

- Develop a standard process for calculating the price of goods sold to employees, ensuring that all costs such as raw materials, labor, and overhead are included. This will provide some consistency of pricing between employee sales for the same or similar items.

- Develop procedures that ensure that every employee sale has the appropriate documentation, and that products are paid for prior to, or at the time of, delivery.

Management's Responses:

- *Agree to implement recommendation. TCI has drafted a policy and procedure to address this recommendation. The policy and procedure are presently being reviewed by TDCJ's Legal Division.*

- *Agree to implement recommendation. TCI has drafted a policy and procedure to address this recommendation. The policy and procedure are presently being reviewed by TDCJ's Legal Division.*

- *Agree to implement recommendation. TCI has drafted a policy and procedure to address this recommendation. The policy and procedure are presently being reviewed by TDCJ's Legal Division.*

Section 3-D:

Controls Over Fixed Assets Appear to Be Adequate, But Documentation of Maintenance Should Be Improved

TCI's controls over fixed assets provide reasonable assurance that assets are safeguarded and properly accounted for. While fixed assets are monitored centrally by Department headquarters accounting, the unit property manager and the factory manager are responsible for the items physically located in their areas. Policy requires an annual inventory, which is based on a list provided by Department headquarters. In addition, a new factory manager has 90 days to conduct a complete fixed asset inventory or accept responsibility for those items assigned to the factory. We tested fixed assets and equipment maintenance records at a sample of factories.

We were able to locate all items tested at the factories we visited except for those indicated as being deleted through transfer or obsolescence. In addition, each factory had conducted an annual inventory as required by policy.

We also reviewed equipment maintenance procedures at six factories. Two factories lacked sufficient documentation of their equipment maintenance activities. Although there was evidence that some maintenance was being performed, the lack of documentation prevents the factory managers from having the information needed to make decisions about when to replace or repair equipment. Also, it prevents managers from knowing if all needed maintenance has been performed. At one factory we visited, one piece of equipment required an estimated $30,000 in repairs after being damaged by fire. Had preventative maintenance been performed on one of its safety systems, the damage would not have been so extensive.

Recommendation:

TCI operational reviews should include testing of maintenance records.

Management's Response:

Agree to implement recommendation. TCI will utilize compliance review team to be established by recommendation 2-D. (1) for the implementation of this recommendation.

This page intentionally left blank.

Letter From Management

TEXAS DEPARTMENT OF CRIMINAL JUSTICE

Wayne Scott
P.O. Box 99 •Huntsville, Texas 77342-0099 Executive Director

October 20, 1997

Julie Ivie
Project Manager
State Auditor's Office
P. O. Box 12067
Austin, Texas 78711-2067

RE: Audit Report on Management Controls at TCI

Dear Ms. Ivie:

Enclosed are TCI's management responses to the forty-one recommendations contained in the final draft version of the *Audit Report on Management Controls at TCI.* TCI is taking steps to implement all of the recommendations. However, some sections in some of the recommendations contained conflicts with statutory obligations, or with other recommendations, and will be implemented with modifications.

I have been informed by Mr. John Benestante, Assistant Director for Industry, that you have agreed to provide advice and input to the action teams that will be working toward the implementation of these recommendations. Mr. Benestante has set an aggressive schedule to achieve implementation of the recommendations within eighteen months and your assistance will aid in achieving this goal.

In order to implement several of the recommendations, appropriated funds will need to be secured to provide staff and cover implementation costs. TDCJ may, or may not, be able to secure funds for this project. As TCI progresses with the implementation of the recommendations, Mr. Benestante will regularly forward updated status reports.

Your assistance is greatly appreciated.

Sincerely,

Wayne Scott

Wayne Scott

cc: Nancy Patton
Art Mosley
John Benestante
Raymond Pyeatt
Sharon Keilin

This page intentionally left blank.

Appendix 1:

Objective, Scope, and Methodology

Objective

Our audit objective was to examine and evaluate TCI's management control systems to identify both strengths and opportunities for improvement. We evaluated these control systems to determine whether they provide reasonable assurance that TCI's objectives will be met. Our audit evaluated the control systems in place for the fiscal year ended August 31, 1997.

Management controls are the policies, procedures, and processes used to carry out an organization's objectives. They should provide reasonable assurance that:

- Goals are met.
- Assets are safeguarded and efficiently used.
- Reliable data are reported.
- Laws and regulations are complied with.

Management controls, no matter how well designed and operated, can only provide reasonable assurance that objectives will be achieved. Human error, circumvention by collusion, and management override can reduce the effectiveness of the established controls. However, monitoring established controls can assist in detecting and correcting weaknesses in a timely manner.

Scope

The scope of this audit included consideration of TCI's overall management control systems: policy management, information management, resource management, and performance management.

Consideration of TCI's policy management system included review and testing of:

- Processes used to create, monitor, and adjust TCI plans
- Documents related to the development of strategic, operating, and work plans
- Requests to the Texas Department of Criminal Justice (Department) for appropriated funds and operating budgets
- Processes, controls, and reports used to plan, create, administer, control, monitor, report on, and adjust TCI budgets
- Relationships between the Department's strategic plan and TCI's strategic plan
- Processes used to develop, document, review, and revise policies and procedures

Consideration of TCI's information management system included review and testing of controls related to the Industrial Operating Information System as well as TCI's manual information systems, including:

- Plans for system implementation and selection of the project manager
- Processes used to identify, collect, classify, evaluate, maintain, and update information
- Existing management reports
- The availability, timeliness, accuracy, and communication of information needed to support TCI's mission, goals, and objectives

Consideration of TCI's resource management system included review of the processes for:

- Ensuring that inventories, fixed assets, and equipment are adequately safeguarded
- Managing cash (accounts payable and accounts receivable)
- Procuring goods needed for production

Consideration of TCI's performance management system included review of the processes for:

- Ensuring quality products and services
- Capturing, reporting, and evaluating actual performance

Methodology

Information collected to accomplish our objectives included the following:

- Interviews with personnel at TCI; Department executive management, Transportation and Warehouse, Purchasing and Leases; and members of the Board of Criminal Justice.

- Documentary evidence such as:

    - Minutes of the Board of Criminal Justice and the Prison Industry Advisory Board
    - Department and TCI plans, goals, budgets, memoranda, policies, and procedures
    - TCI-generated data on sales activity, overhead, costs of goods sold, and production levels
    - Inventory data and count sheets from spot checks and the annual physical count of raw materials, finished goods, small tools, and consumable inventories
    - Customer complaints
    - Cost analyses and supporting documents
    - TCI product and services catalogs
    - Employee and inmate accident reports
    - Employee personnel files, job descriptions, and postings

- Newspaper articles and reports relating to TCI and other states' prison industry programs

- Prior audits conducted by the Texas Department of Criminal Justice's Internal Audit Department and the Texas Performance Review

Procedures and tests conducted:

- Direct observation of physical security controls over inventories at six factories and one warehouse
- Direct observation of the condition, layout, and types of plant, property, and equipment under stewardship of TCI at six factories and one warehouse
- Phone surveys or interviews of all factory accountants about quality control procedures, inventory management, the Industrial Operations Information System, fixed asset management, pricing, and general financial management
- Review of six business plans and comparison of information in these plans to similar information presented to the Board of Criminal Justice
- Review and comparison of TCI's strategic plan and the Department's strategic plan
- Comparison of factory budgets to actual expense information
- Survey of past TCI customers about their satisfaction with TCI products and services
- Analysis of overhead recovered through pricing
- Comparison of actual overhead to estimated overhead
- Verification of complaint resolution

Analysis techniques used:

- Control reviews
- Trend analysis
- Ratio analysis
- Data comparison

Criteria used:

- State Auditor's Office Accountability Project Methodology general and specific criteria
- General Government Code Title 10
- 1996 General Appropriations Act
- Department and TCI plans, policies, and procedures

Other Information

Fieldwork was conducted from February 1, 1997, to August 15, 1997. The audit was conducted in accordance with applicable professional standards, including:

- Generally Accepted Government Auditing Standards
- Generally Accepted Auditing Standards

There were no significant instances of noncompliance with these standards.

The audit work was performed by the following members of the State Auditor's staff:

- Julie L. Ivie, CIA (Project Manager)
- Linda C. Buford, CPA
- Rachel Cohen, CPA
- William D. Hurley, CPA
- Kimberlee N. McDonald
- Sandra L. Queen
- M. Betsy Schwing, CPA
- John W. Swinton, MPA
- Charles R. Hrncir, CPA (Audit Manager)
- Craig D. Kinton, CPA (Audit Director)

Appendix 2:

Profile of Texas Correctional Industries

Mission and Objectives

The Industrial Division of the Texas Department of Criminal Justice (Department) began operation in 1963 with the passage of Senate Bill No. 338 which authorized the Department to sell prison-made goods to all tax-supported agencies and political subdivisions thereof. Today the Industrial Division is known as Texas Correctional Industries (TCI).

Government Code Section 497.022 establishes five purposes for TCI:

- Provide adequate, regular, and suitable employment for the vocational training and rehabilitation of inmates, consistent with proper penal purposes.
- Use the labor of inmates for self-maintenance.
- Reimburse the State for expenses caused by the crimes of inmates and the cost of their confinement.
- Provide for the requisition and disbursement of institutional division articles and products through established state authorities to eliminate the possibility of private profits from the distribution of those articles and products.
- Provide materials, products, or articles for sale to or for the use of the State or a political subdivision of the State.

Operations

TCI operated 44 factories during fiscal year 1996. These factories are divided into five divisions (by category of goods produced):

Figure 3

Division	No. of Factories	Products	Primary Customer	TDCJ[1] Staff	Number of Inmates Employed	Sales (in millions)[2] Fiscal Year 1995	Sales (in millions)[2] Fiscal Year 1996
Garment	11	Yarn, inmate clothing, towels, officer uniforms	TDCJ	126	2,752	$38.5	$29.6
Graphics	10	License plates, validation stickers, plastics, corrugated cardboard, forms, data entry, GIS	TXDOT[3] TDCJ Cities Schools	108	1,820	20.8	22.3
Manufacturing	9	Soap, shoes, school bus repair, mattresses, pillows, recapped tires	TDCJ MHMR[4] Schools	75	1,187	20.8	15.9
Metal	7	Highway signs, security and jail steel, dump truck beds	TDCJ TXDOT Counties	98	977	18.9	16.5
Wood	7	Furniture, custom furniture, refinished furniture	TDCJ State Cities Counties	67	1,039	13.8	9.3
TOTAL	**44**			**474**	**7,775**	**$112.8**	**$93.6**

[1] TDCJ = Texas Department of Criminal Justice
[2] Reported by TCI
[3] TXDOT = Texas Department of Transportation
[4] MHMR = Texas Department of Mental Health and Mental Retardation

All products sold by TCI are required to meet specifications developed by and through the General Services Commission. State agencies are required to purchase goods and services they need from TCI (if TCI produces the item) unless the General Services Commission determines that TCI's product does not meet the needs of the agency.

Funding

TCI operates from Industrial Revolving Funds and from legislative appropriated funds. Appropriated funds are to be used for expenditures related to the manufacture of items used within the Department. This includes expenditures such as buildings, equipment, raw materials, supplies, repairs, utilities, and supervisory salaries that go into products consumed by Department inmates. In fiscal year 1997, TCI received $20.5 million in appropriated funds.

The Industrial Revolving Fund is to be used for expenditures attendant to goods and service items sold to other tax-supported entities. The resources of the Industrial Revolving Fund "revolve"—that is, revenue from sales is returned to the fund to pay for the raw materials, supervisory salaries, etc. needed to produce more goods for sales to other governmental entities. For fiscal year 1997, the Department estimated revolving fund receipts at $63.5 million.

Appendix 3:

Results of Other States' Reviews of Their Prison Industry Programs

As part of the 1996 National State Auditors Association's joint audit of corrections industries programs, 13 states conducted fieldwork and issued reports on their prison industry programs. Many of the results found in other states mirror those we found in Texas. The results of these 13 states' audits are summarized below.

LEGEND:

+ Tested and found acceptable
- Tested and found unacceptable
? Tested but there was insufficient information to determine acceptability

Blanks indicate that the area was not tested by that state's audit.

Figure 4

	CA	DE	FL	MD	MO	NJ	NY	OR	PA	RI	VA
Program is self -sufficient	-	-			+	-	-		+		-
Program reduces cost to taxpayers	-	-			+	+	-	?	?		
Program maximizes inmate employment while incarcerated	-		-	-			-	-			
Program maximizes the employability of inmates when released	-	-	-	-	-	-				-	
Program has conflicting program goals	+			+	+	+		+	+	+	+
Program effectively uses strategic planning	-	-	-	-		-	-	-	-	-	-
Market restrictions do not inhibit program efficiency	-	-	-	-	-	-	-				-
Program has developed partnerships with the private sector			+		+			+			+
Program has an adequate inmate selection process	-		+		+	-	-				
Program has a job placement mechanism for released inmates	-	-	+			-					

Figure 4 (concluded)

	CA	DE	FL	MD	MO	NJ	NY	OR	PA	RI	VA
Program matches inmate employment opportunities with the labor market	-	?	+			-				?	
Program accurately tracks product costs	-			-				-	-	-	
Program includes sound sales and marketing efforts	-	-		-	+		-		-	-	-
Program includes a good quality assurance mechanism						-	-	-	-	-	
Program delivers products in a timely fashion	-			-			-		-		-
Program includes sufficient controls over inventory	-						-	-			

CA - California
DE - Delaware
FL - Florida
MD - Maryland
MO - Missouri
NJ - New Jersey
NY - New York
OR - Oregon
PA - Pennsylvania
RI - Rhode Island
VA - Virginia

Appendix 4:

Detailed Findings on TCI's Cost Accounting System

Section 2-A provided an overview of the weaknesses in TCI's cost accounting system. This appendix provides detailed information on these weaknesses.

TCI's cost accounting system does not adequately allocate costs to products. We found weaknesses in each component of TCI's cost accounting system:

- **Cost analyses are not complete or accurate.** Factories calculate the cost to produce individual products through "cost analyses." These cost analyses are submitted to TCI headquarters for consideration in the price-setting process. Therefore, inaccurate costs in the costs analyses could affect TCI's ability to make good decisions about reasonable product prices.

  To determine the cost of products (and prepare a product cost analysis), factory management calculates:

  - The amount of each raw material used in the product
  - The historical cost of those raw materials
  - The number of inmate labor hours it takes to produce the product

  The estimated number of inmate labor hours is multiplied by the overhead allocation rate calculated by TCI headquarters. Raw material costs and overhead costs are then summed to determine the product's "cost." For products typically sold to customers other than the Department, factories sometimes add a profit or contingency amount to the basic product cost.

  The following weaknesses in this process result in inaccurate cost analyses, and therefore, inaccurate data on which to base pricing decisions:

  - <u>Raw material costs are not always up-to-date</u>. At one factory we visited, raw material cost figures used in some cost analyses were up to nine years old. As a result, the cost analysis understated the current raw material cost for that product.

  - <u>Labor hours are estimated, and industry standards or time studies are not used to verify the reasonableness of these estimates</u>. Currently, factories determine how many hours of inmate labor go in to making each item, and this number of hours, multiplied by the overhead allocation rate, is included in each cost analysis. Typically, TCI's estimates are done once a job is set up, and do not include slow times, when it takes more inmate hours to produce the goods. Even in cases where there are published industry standards for time estimates, these standards are not used. For example, one factory that does routine repair work on vehicles does not use the standards developed by *Chilton's* for vehicle repair.

- <u>All costs are not included</u>. Cost analyses do not consider the costs associated with maintaining an inventory of frequently used parts. As a result, when a part is no longer used, the factory must absorb the cost of the obsolete inventory. In private sector manufacturing entities, there is frequently an "obsolescence factor" added on to the cost of materials to help absorb these costs.

- <u>Overhead rates are sometimes intentionally changed, even when better estimates of overhead costs are known</u>. TCI headquarters calculated the overhead rate for one garment factory at $5.46 per inmate labor hour. However, TCI management decided to have all garment factories use the same overhead rate in an effort to make costs appear comparable among all garment factories. Therefore, the factory was told to use $2.88 per inmate hour (the average overhead application rate for garment division factories) in its cost analyses. As a result, the factory's cost analyses resulted in costs that were less than TCI knew them to be, and TCI lost information about what the different costs were of producing items at different factories.

• **TCI's method of allocating overhead to products has not ensured that these costs are covered.** Overhead includes those costs incurred in the production process which are not easily identifiable in the final product. For example, equipment maintenance costs and the salaries of supervisors are typically considered to be overhead. Factory overhead must be allocated to products so that inventory valuations include all costs associated with producing goods.

TCI provides each factory with an overhead allocation rate at the beginning of each fiscal year. This rate is to be used in the factory's cost analyses and is developed by dividing the amount of overhead charged to the factories by the number of direct labor inmate hours in the prior year. As long as no major changes are anticipated, this method should effectively assign overhead costs to products. However, the number of inmate hours per unit of production is not always accurately estimated, and there is no adjustment to ensure that all of the costs are eventually assigned to products.

For example, at one factory, we reviewed the overhead allocated to three products that comprised over 95 percent of the number of all units produced and over 98 percent of the sales of the factory for 1996. This factory recovered only $31,361.15 (3.5 percent) of the overhead it was charged with through its sales prices for these items. (See Figure 5.) Revised expense estimates for the year suggest that actual overhead incurred by this factory were even higher than the overhead allocated to it. If the factory had been charged for its actual salaries and expenditures, there would have been even more overhead not recovered.

Figure 5

Clements Shoe Factory Overhead Covered by Sales Fiscal Year 1996					
Item	**Number Produced**	**Price Per Unit**	**Sales price**	**Overhead Per Unit in Cost Analysis**	**Overhead Included in Prices Charged**
Steel Toe Shoes	186,532	$16.00	$2,984,512.00	$0.04	$7,461.28
Non-Steel Toe Shoes	93,252	$15.00	1,398,780.00	$0.04	3,730.08
Officer Belts	12,847	$7.50	96,352.50	$1.57	20,169.79
Total, selected items			**$4,479,644.50**		**$31,361.15**
According to the fiscal year 1996 financial statements, this factory incurred $915,652.60 in overhead expenses. Because the factory received only $31,361 for overhead, over $884,000 was not recovered in the prices for these items.					

This factory used the allocation rate calculated by TCI headquarters, and applied it as instructed. The factory requested and received permission to charge a price slightly higher than the costs reflected on the cost analysis. However, because neither the factory nor TCI tracked the allocation of overhead, no one recognized that the established prices were not sufficient to cover costs. We calculate that, if the overhead attributed to the factory were to be recovered through the prices of these products, the prices would need to be increased by over 25 percent.

The factory raised its prices in fiscal year 1997 based on a new cost analysis and revised overhead allocation rates provided by TCI. The new prices, for example, allocated $5.61 per pair of shoes to overhead instead of $0.04. However, we found that overhead is still under-allocated to production, but not by as much. For April 1997, $83,307 was allocated to overhead through prices, and $115,319 was attributed to overhead by TCI. That is, 73 percent of the allocated overhead is being recouped through the prices for a typical month.

- **Assignment of overhead to the individual factories has not been based on actual cost or adjusted to reflect actual costs.** Through fiscal year 1996, the total amount of factory overhead attributed to each factory was based on estimates from 1992. Each factory was provided with the overhead amounts that would be attributed to it on its financial statements, and this amount was never adjusted to reflect actual expenses. As a result:

  - There are no incentives for factories to control these costs.
  - Changes in overhead expenses are not carried through to the profit and loss statements.
  - Factory financial statements are not accurate or meaningful.

Figure 6

Selected Items From the Year-End Financial Statements for Coffield Metal Fabrication Plant			
	Fiscal Year		
Item	1994	1995	1996
Supplies expense	$ 134,423	$ 134,423	$ 134,423
Cost of Raw Materials	2,006,360	798,151	807,607
Total Sales	**$ 4,291,602**	**$ 1,417,979**	**$ 1,958,397**
Supplies as a percentage of sales	3.13%	9.48%	6.86%

For example, the amount of the supplies attributed to one plant remained constant throughout fiscal years 1994, 1995, and 1996, even though its sales and its purchases of raw materials decreased significantly during that period. (See Figure 6.) TCI has recently identified actual fiscal year 1996 expenses for the salaries and cash expenditures included in factory overhead.

Although it is still necessary to rely on estimates for allocation of approximately $9.5 million (32 percent of the total overhead), using the revised figures to describe the actual salary and cash expenditures provides better information about factory financial performance.

Using these figures, but relying on TCI's original allocations for depreciation, utilities, and the amount allocated to each factory to cover TCI headquarters expense, we calculated the amount of overhead that was over- or under-allocated on the factories' fiscal year 1996 financial statements. Our review found that for many factories, the over- or under-allocation of overhead was significant. For 9 of the 44 factories, correcting the amount of salaries and other cash expenditures recorded in the overhead made the difference between an overall profit or an overall loss for the year. The effects of using these revised overhead amounts on the fiscal year 1996 factory financial statements is presented in Appendix 4-1.

Without accurate information about the costs of overhead at each plant, TCI cannot know whether or not a factory is profitable. In addition, it cannot make decisions on how to price its products, or whether to expand or discontinue a line of products.

- **Adjustments to inventory amounts are not consistent.** Inventory amounts on factory financial statements are adjusted to reflect raw materials damaged during production and to reflect differences, or variations, between inventory records and actual inventory counts. However, factories make these adjustments according to their own criteria. Therefore, factories' inventory amounts are not consistently presented on the financial statements, and factories' gross profit or loss is subject to manipulation.

- **TCI's methodology for pricing its products does not ensure that costs are covered.** Factories recommend prices based on their cost analyses, but TCI generally sets prices for catalog items at 10 percent less than competitors' prices. As a result, there is no guarantee that the prices charged cover the costs of production, either on an individual product basis or as a whole for the product line.

Prices are developed for non-catalog items in different ways at different factories. One factory we visited maintained detailed historic data and used it for pricing custom jobs specifically to ensure that costs were covered. (This factory did not use the overhead allocation rates required by TCI.) Other factories developed quotes for custom jobs based on analyses similar to a cost analysis. Still others used price lists which had been in effect for years. These factories did not have documentation to support how these prices were calculated.

Recommendations for improvements and management's response to these recommendations are included in Section 2-A.

Appendix 4-1:

The Effect of Using Revised Overhead on Factory Gross Profit

Figure 7

	Unit Name	Overhead Charged on Fiscal Year 1996 Statements	Revised Fiscal Year 1996 Overhead (See Note 1)	Overhead Over (Under) Charged For Factory	Overhead Over (Under) Charged For Division	Gross Profit (Loss) Per Fiscal Year 1996 Statements	Gross Profit (Loss) Using Revised Overhead (See Note 2)
Garment	Eastham	$558,821	$459,000	$99,821		($11,740)	$88,081
Division	Ellis I	$271,630	$346,828	($75,198)		$36,175	($39,023)
	Estelle (Ellis II)	$1,220,304	$1,128,586	$91,718		($2,103,996)	($2,012,278)
	Hightower	$408,683	$406,286	$2,397		$46,585	$48,982
	Hilltop	$495,006	$500,272	($5,266)		$40,935	$35,669
	Hughes	$920,878	$851,287	$69,591		$70,167	$139,758
	Huntsville	$1,010,150	$1,052,307	($42,157)		$295,097	$252,940
	Jester III	$194,072	$179,266	$14,806		$97,952	$112,758
	McConnell	$533,995	$461,444	$72,551		($12,858)	$59,693
	Robertson	$679,462	$658,317	$21,145		$10,200	$31,345
	Wallace	$355,326	$172,100	$183,226		$88,261	$271,487
	sub-total				$432,634		
Graphics	Coffield	$611,514	$850,019	($238,505)		$391,814	$153,309
Division	Ferguson	$556,017	$593,275	($37,258)		($251,387)	($288,645)
	Hobby	$815,020	$914,082	($99,062)		$65,880	($33,182)
	Mountain View	$435,416	$354,024	$81,392		$27,084	$108,476
	Powledge (Beto II)	$560,379	$762,301	($201,922)		$75,043	($126,879)
	Torres	$797,065	$761,522	$35,543		($96,735)	($61,192)
	Wynne Tag	$834,109	$765,701	$68,408		$2,269,817	$2,338,225
	Wynne RCF	$1,134,728	$1,304,788	($170,060)		($18,188)	($188,248)
	Wynne Sticker	$522,937	$707,416	($184,479)		$1,016,711	$832,232
	Wynne Box & Sign	$314,466	$335,739	($21,273)		$230,716	$209,443
	sub-total				($767,216)		
Manu-	Central	$673,934	$733,203	($59,269)		$910,663	$851,394
facturing	Clements	$915,653	$1,372,754	($457,101)		$25,534	($431,567)
Division	Darrington	$319,890	$289,866	$30,024		($62,655)	($32,631)
	Ellis I	$679,175	$695,071	($15,896)		($5,910)	($21,806)
	Ferguson	$222,473	$204,515	$17,958		$179,190	$197,148
	Jordan	$359,627	$399,218	($39,591)		$298,725	$259,134
	Roach	$611,703	$444,470	$167,233		($53,627)	$113,606
	Smith	$353,935	$335,572	$18,363		($6,881)	$11,482
	Wynne	$336,014	$318,008	$18,006		$158,575	$176,581
	sub-total				($320,272)		
Metal	Beto I	$685,870	$645,486	$40,384		$1,659,231	$1,699,615
Division	Boyd	$962,585	$789,648	$172,937		($508,238)	($335,301)
	Coffield	$1,322,687	$956,559	$366,128		($198,393)	$167,735
	Luther (Pack II)	$1,097,056	$759,291	$337,765		($419,576)	($81,811)
	Michael	$1,081,345	$850,339	$231,006		($637,413)	($406,407)
	Powledge (Beto II)	$802,217	$793,799	$8,418		($163,584)	($155,166)
	Stiles	$966,137	$788,646	$177,491		($282,930)	($105,439)
	sub-total				$1,334,129		

Please see Notes on next page

Figure 7 (concluded)

	Unit Name	Overhead Charged on Fiscal Year 1996 Statements	Revised Fiscal Year 1996 Overhead (See Note 1)	Overhead Over (Under) Charged For Factory	Overhead Over (Under) Charged For Division	Gross Profit (Loss) Per Fiscal Year 1996 Statements	Gross Profit (Loss) Using Revised Overhead (See Note 2)
Wood	Briscoe	$758,606	$730,173	$28,433		($310,051)	($281,618)
Division	Daniel	$844,087	$854,001	($9,914)		$314,364	$304,450
	Ellis I	$755,988	$713,227	$42,761		($368,585)	($325,824)
	Jester III	$197,535	$146,709	$50,826		($104,367)	($53,541)
	Lewis	$912,139	$922,285	($10,146)		$34,346	$24,200
	Ramsey I	$879,033	$726,017	$153,016		($207,502)	($54,486)
	Stevenson Modular	$550,611	$662,183	($111,572)		($210,274)	($321,846)
	Terrell	$0	$78,584	($78,584)		$0	($78,584)
	sub-total				$64,820	$2,308,175	$3,052,271

Note 1: As described in the text of this report, the revised overhead amounts are still not actually "correct." Actual amounts have been used to replace allocated amounts for cash expenditures, including salaries. Allocated amounts are still included unchanged from the original financial statements for utilities, depreciation, loss on disposal of assets, and the overhead component allocated to the factories to cover TCI headquarters.

Note 2: Although these revised profits and losses may be more accurate than those on the financial statements, they are still not correct. We have not determined whether (1) the right amount ($9.5 million) was charged to the factories for depreciation, utilities, losses on asset disposal, and expenses for TCI's headquarters, and (2) whether, if $9.5 million was the right total, whether the amount allocated to each factory was reasonable. The differences in the allocation method could make a significant difference. For example, when the allocations are distributed among the factories in proportion to their sales, Stiles Metal shows a profit of $240,000 instead of a loss of $283,000 loss. (If we assume that the allocations were right, then Stiles should have shown an $105,000 loss for the year.)

Appendix 5:

Detailed Analysis of TCI's Financial Statements

Section 2-B provided an overview of the errors in TCI's financial statements. This appendix provides detailed information on these errors.

TCI's factory financial statements are inaccurate. TCI's financial statements do not recognize costs or revenues appropriately, and, as a result, management does not have sound information about amounts of sales, costs of goods manufactured or sold, or whether a factory is making or losing money. Moreover, TCI's financial reporting practices may disguise Department subsidies to other agencies. Inaccuracies in the financial statements are magnified by the inaccuracies in TCI's cost system.

Specific problems with TCI's financial statements include:

- **The Cost of Goods Manufactured figure on the Manufacturing Statement is not accurate.** Cost of Goods Manufactured is calculated by adding the Cost of Raw Materials to the allocated overhead for the period.[3] The Cost of Goods Manufactured is the "bottom line" on a manufacturing statement, and is necessary for calculating net profit or loss on the income statement.

    - Generally, manufacturing concerns calculate the Cost of Raw Materials by adding purchases made during the period to the beginning inventory, and then subtracting ending inventory. While TCI presents this information in its financial statements, the resulting Cost of Raw Materials is not the figure used in determining the Cost of Goods Manufactured or in the rest of the financial statements. Instead, a different figure is used, which, according to TCI staff, comes from individual factory work orders.

      In the summary statements for fiscal year 1996, the difference between the Cost of Goods Manufactured computed by the different methods amounted to $57,000. At individual factories, the differences can be more significant. For example, at the Lewis Wood Plant, the difference in the two figures was over $224,000. The figure used in the Income Statement was the lower figure, resulting in a probable $224,000 overstatement of the factory's net profit. Had the Cost of Raw Materials used the standard method, the factory would have shown a loss of over $190,000 instead of showing a $34,000 profit.

---

[3] Typically, a manufacturing statement also includes the costs for direct labor. However, at TCI, inmates are not paid for their labor, and supervision of inmates is considered to be overhead. Therefore, there are no direct labor costs included.

- As discussed in Section 1-B of this report, overhead amounts are not accurate. From fiscal year 1993 to fiscal year 1996, overhead allocation amounts were based on expenses from 1992. For example, a TCI factory that reduced personnel costs but maintained the same level of sales would not show an increase in net income.

  Because neither the Cost of Raw Materials nor the allocated overhead is accurate, the Cost of Goods Manufactured can not be accurate. This means that in the Income Statement, the Cost of Goods Sold will not be accurate, and the net profit or loss will also be inaccurate.

• **The Departmental Sales figure on the Income Statement is not accurate.** Departmental sales include interfactory transfers and are adjusted to eliminate "profit." However, the profit is a plug figure and is neither accurate nor consistent with other parts of the income statement. Inaccurate sales information affects TCI's calculation of net profit or loss on the Income Statement.

  - Interfactory transfers are treated as Departmental Sales, overstating both sales and Cost of Goods Sold. On the Income the Statement, Departmental Sales are comprised of both sales to Texas Department of Criminal Justice of items such as inmate clothing and mattresses and of interfactory transfers (such as shipments of material woven at one factory to be made into clothing for inmates at another). Recording both types of sales as the same, without eliminating interfactory transfers, overstates sales and the related Cost of Goods Sold. For three factories whose sales are almost exclusively interfactory transfers (Estelle Weaving, Huntsville Textile Mill, and Jordan Shoes), approximately $12 million in sales was counted twice on the income statement. Other factories' interfactory transfers are not included in this figure. If they were included, the amount double counted would be greater.[4]

  - Net Departmental Sales is inaccurate. TCI does not calculate its Net Departmental Sales by subtracting a known profit from actual sales. Instead, the sum of Cost of Raw Materials used for departmental sales and the factory overhead attributed to departmental sales is considered to be the Net Departmental Sales. See Figure 8 for an example of this calculation. The difference between this figure and the factory-reported Departmental Sales is computed and reported as the "profit" or "loss" associated with these departmental sales. Figure 9 shows how the data from the Manufacturing Statement is brought forward to the Income Statement.

[4]If the amount of the Cost of Goods Sold were accurate, the amount of gross profit would not be affected by combining transfers with sales. It would simply look as if the profits recorded related to a larger number of sales.

Figure 8

Jordan Blind/Sewing Data from Manufacturing Statement Fiscal Year 1996		
	Outside Sales	**Departmental Sales**
Cost of Raw Materials	$ 8,792	$ 1,554,919
Factory Overhead	2,022	357,605
Cost of Goods Manufactured	$ 10,814	$ 1,912,524*
*to Net Departmental Sales on Income Statement		

Neither the Net Departmental Sales figure nor the departmental profit/loss figure that TCI uses in its Income Statements is accurate. As explained above, TCI's calculation of Net Departmental Sales includes departmental overhead. Departmental overhead is calculated based on each factory's ratio for departmental use of raw materials, and since overhead is inaccurate, its allocation in the calculation of net departmental sales makes this figure inaccurate as well.

Figure 9

Jordan Blind/Sewing Income Statement Fiscal Year 1996		
Sales:		
Outside		$ 16,396
Departmental	$ 2,298,728	
Less Departmental Profit	$ (386,204)	
Net Departmental Sales		$ 1,912,524
Net Sales		$ 1,928,920
Less Cost of Goods Sold		$ (1,630,195)
Gross Profit		**$ 298,725**

TCI's calculation of departmental profit is also incorrect. If the calculation were correct, after Departmental Sales were reduced by the amount of departmental profit, then the only profit reported on the income statement should result from outside sales. However, when we reviewed statements from factories with very few outside sales, we found that the profit component was not accurately stated.

For example, as Figure 9 shows, the Jordan Blind and Sewing (Jordan) plant reported its departmental profit as $386,204, and its Net Departmental Sales as approximately $1.9 million for fiscal year 1996.

(This accounts for all but about $16,000 of Jordan's sales for the year.) Cost of goods sold (for departmental and outside sales) was recorded at only $1.6 million, resulting in a gross profit of $298,725. However, it is impossible to have earned almost $300,000 in profit from only $16,000 in outside sales. Therefore, TCI's method for determining departmental profit and Net Departmental Sales results in misstatements.

Because Departmental Sales is not accurate, the final determination of gross profit will also be inaccurate. Gross profit is calculated by subtracting Cost of Goods Sold from the total (Departmental and outside) sales.

- **TCI's financial reporting practices may disguise Texas Department of Criminal Justice subsidies to other agencies.** TCI reduces its overall factory losses by the amount of the departmental profits that had been recorded earlier. If a factory shows a net loss for the period, but the factory had indicated some profit for the departmental sales, then TCI reduces the loss by the amount of the profit on departmental sales. In this way, TCI applies departmental profits to defray the losses TCI incurred in preparing goods for other agencies. For example, at Estelle Textile, after Departmental Profits had been removed from the sales figures, there was a $2.1 million net loss on the outside sales of $10,200. This figure was reduced to $304,000 when the departmental profit was applied to these outside sales. This adjustment may permit Texas Department of Criminal Justice to absorb losses incurred on sales to outsiders.

  Ten of TCI's 44 factories defrayed losses on outside sales by adding back the profit made on departmental sales, for a recorded total of $2.1 million. However, because the financial statements are inaccurate, we can not determine the true amount of losses that the Texas Department of Criminal Justice has absorbed from outside sales.

Recommendations for improving these financial statements and management's response are included in Section 2-B.

Appendix 6:

Customer Satisfaction Survey

Appendix 6.1:

Results

To determine how satisfied customers are with TCI's products, we developed a questionnaire and mailed it to a sample of TCI's customers. As discussed in Section 1-B, because TCI did not have good information about its customers, we could not select a statistically random sample. Our sample was judgmentally selected and included:

- A mix of large and small customers
- Customers who bought goods from TCI in prior years but not the current year
- Customers who had expressed concerns with TCI products
- Customers who formally complimented TCI on the quality of their products.

Of the customers surveyed, 83 responded. The questions asked and a summary of responses received to each question in Section 1 of our survey are provided below. Responses to Section 2 and Section 3 of our survey were inconsistent and could not be aggregated.

Figure 10

Survey Question	Agree Strongly	Agree	Disagree	Disagree Strongly	Very Important	Important	Unimportant	Very Unimportant
1. TCI treats me as an important customer.	26	49	6	0	38	34	1	0
2. It is easy to place an order with TCI.	22	48	9	0	39	34	0	0
3. TCI can rush my orders when I find it necessary.	9	35	22	5	35	28	1	1
4. TCI is courteous and knowledgeable when I inquire about the status of my order.	27	45	7	2	31	40	0	1
5. TCI products are delivered within a reasonable time.	13	40	21	5	39	29	1	1
6. TCI delivers my order when promised.	13	42	17	8	40	30	1	1
7. TCI products/services are defect free.	8	38	28	5	38	30	1	1
8. TCI provides high quality products and/or services.	13	49	12	3	39	30	0	1

Figure 10 (concluded)

Survey Question	Agree Strongly	Agree	Disagree	Disagree Strongly	Very Important	Important	Unimportant	Very Unimportant
9. I frequently have to return TCI items that are defective or shipped in error.	3	18	44	14	22	37	8	1
10. It is easy to return TCI items that are defective or shipped in error.	8	51	9	0	25	33	4	0
11. TCI products and services are competitively priced.	20	55	5	0	43	26	2	0
12. My invoices are accurate.	18	54	4	0	31	39	1	0
13. My invoices are easy to understand.	18	53	4	0	31	39	1	0
14. TCI informs me about delays in my order.	13	40	22	5	37	31	2	0
15. TCI discusses custom orders with me prior to production.	14	37	9	4	30	25	4	0
16. Custom orders are produced according to my specifications.	16	50	2	1	40	20	1	0
17. My complaints are resolved satisfactorily.	18	47	7	0	48	18	1	0
18. My complaints are resolved in a timely manner.	17	36	17	0	42	22	1	0

Appendix 6.2:

Survey Instrument Used

Section 1 - Satisfaction With TCI's Quality, Delivery, and Service

Figure 11

Please check the box that best describes your level of agreement with the following statements as they relate to **your experience** with TCI.					Please check the box that best describes the importance of each of the following statements as they relate to **your business**.			
	Agree Strongly	Agree	Disagree	Disagree Strongly	Very Important	Important	Unimportant	Very Unimportant
1. TCI treats me as an important customer.								
2. It is easy to place an order with TCI.								
3. TCI can rush my orders when I find it necessary.								
4. TCI is courteous and knowledgeable when I inquire about the status of my order.								
5. TCI products are delivered within a reasonable time.								
6. TCI delivers my order when promised.								
7. TCI products/services are defect free.								
8. TCI provides high quality products and/or services.								
9. I frequently have to return TCI items that are defective or shipped in error.								
10. It is easy to return TCI items that are defective or shipped in error.								
11. TCI products and services are competitively priced.								
12. My invoices are accurate.								

Figure 11 (concluded)

Please check the box that best describes your level of agreement with the following statements as they relate to **your experience** with TCI.					Please check the box that best describes the importance of each of the following statements as they relate to **your business**.			
	Agree Strongly	Agree	Disagree	Disagree Strongly	Very Important	Important	Unimportant	Very Unimportant
13. My invoices are easy to understand.								
14. TCI informs me about delays in my order.								
15. TCI discusses custom orders with me prior to production.								
16. Custom orders are produced according to my specifications.								
17. My complaints are resolved satisfactorily.								
18. My complaints are resolved in a timely manner.								

Section 2 - Trends and Overall Impression

1. **As a purchaser of TCI products and services, rank in order of *satisfaction*** (1 for most satisfied to 4 for least satisfied).

   ( ) Delivery Time ( ) Quality
   ( ) Price ( ) Customer Service

2. **As a purchaser of TCI products and services, rank in order of *importance*** (1 for most important to 4 for least important).

   ( ) Delivery Time ( ) Quality
   ( ) Price ( ) Customer Service

3. **From the following methods for ordering products and services, rank in order of usage** (1 for most used) .

   ( ) Telephone ( ) Mail or fax catalog form
   ( ) Mail or fax order form ( ) Other ___________________

For items 4 through 9, check the most accurate response.

4. **Please rate your overall satisfaction with TCI.**

___ 1. Extremely satisfied
___ 2. Satisfied
___ 3. Dissatisfied
___ 4. Extremely dissatisfied

5. **How do you rate TCI's overall performance relative to other suppliers?**

___ 1. Better than other suppliers
___ 2. Same as other suppliers
___ 3. Worse than other suppliers
___ 4. Don't know

6. **Over the last three years, TCI delivery times have:**

___ 1. Improved
___ 2. Remained the same
___ 3. Become worse
___ 4. Don't know

7. **Over the last three years, TCI product quality has:**

___ 1. Improved
___ 2. Remained the same
___ 3. Become worse
___ 4. Don't know

8. **Over the last three years, TCI customer service has:**

___ 1 Improved
___ 2 Remained the same
___ 3 Become worse
___ 4. Don't know

9. **Over the last three years, TCI has:**

___ 1. Become a lower-price alternative to other suppliers
___ 2. Remained a lower-price alternative to other suppliers
___ 3. Become an equal-price alternative to other suppliers
___ 4. Remained an equal-price alternative to other suppliers
___ 5. Become a higher-price alternative to other suppliers
___ 6. Remained a higher-price alternative to other suppliers
___ 7. Don't know

Section 3 - Detail Purchase Information

1. What products/services do you routinely purchase from TCI?

____

____

2. Approximately how many separate orders did you place with TCI during 1996?__________

3. Please provide the following **if this information is readily available to you** for each of your last three orders (use additional sheets if you have other purchases you wish to include):

Information		**Order #1**	**Order #2**	**Order #3**
Product/Service				
Number of Units:	• Ordered			
	• Received			
	• Damaged			
	• Returned			
Promised delivery time (Days)				
Actual delivery time (Days)				
Was product delivered to correct location?				
If installed by Texas Correctional Industries, was installation satisfactory?				
If bids received from other vendors, what was:	• Price/Bid Offered?			
	• Delivery Time Offered?			
	• Vendor's Name			
	• Phone Number?			
Did the quality of TCI products exceed, meet or fail your expectations?				

Name of Business/Agency ______________________________

Your name ______________ Your title ______________ Phone ________

Additional comments: ______________________________

____

____