

OTHER METRO DEPARTMENTAL RECOMMENDATIONS

The Executive Summary addresses Metro-wide organizational issues, and this chapter of the report details recommendations that either should receive immediate attention or are related to more specific aspects of fleet operations. Net financial implications noted are included in cost savings outlined in the Executive Summary, and specific capital recommendations should be absorbed in the capital spending recommendations in the Executive Summary.

METRO-WIDE INTERIM RECOMMENDATIONS:

(1) Current Situation: Staffing Levels

Finding: One of the major benefits of TCI's recommendations is the gradual reduction of staff.

Recommendation: All hiring and promotions should be suspended until a central fleet manager is in place, unless approved by the Metro Finance and Human Resources Departments.

Cost Implications: Included in overall savings in the Executive Summary.

(2) Current Situation: Metro-wide Tire Program

Finding: The tire programs in most of the Metro garage locations are ineffective. Costs and inventory are high, and many operating tires are not in good condition. Several locations had excessive numbers of tires on hand awaiting disposal. The only exception is Nashville Electric Service. They contract with an outside source and obtain better service at reduced costs.

Recommendation: Issue an RFP for a tire contract for all Metro locations, using the NES contract as a model.

Cost Implications: While tire expense data is often combined with other parts, TCI's estimates that savings to Metro would equal \$49,000. The NES contract costs \$106 per vehicle for labor, towing, shrinkage, and carrying cost, while existing Metro costs are \$122 per vehicle for the same costs.

(3) Current Situation: Vehicle Color

Finding: Metro purchases fleet vehicles in various colors – some white, some gray, some yellow.

Recommendation: Adopt white as the recommended color for all fleets except emergency vehicles. Convert to white as new items are purchased. White is less expensive to obtain, safer on the road, easier to maintain, and provides greater resale value.

Cost Implications: While it is difficult to forecast the exact savings, TCI expects that the savings would accrue from initial purchase (white requires no special painting or ordering), maintenance (one paint color, less prone to fading), and resale (wider market for white). TCI estimates that the Metro buys and sells an average of 250 non-emergency vehicles per year. If the savings for purchase and resale were only \$100 per unit, the savings would be approximately \$25,000 per year.

(4) Current Situation: Oil Analysis

Finding: Metro locations are not utilizing oil analysis as a regular maintenance diagnostic procedure.

Recommendation: Develop a contract for this service for Metro departments

Cost Implications: This type of analysis typically costs \$7 per vehicle and should be done 2 times per year. The total annual cost for this procedure is estimated at \$42,000, but this cost should be more than offset with reduced maintenance expense in the long run.

(5) Current Situation: Uncertain Fleet Count

Finding: No single source can provide a list of authorized vehicles that is acknowledged as definitive for fleet management purposes. Fixed asset records underlying the general ledger are not reconciled with operating records, and there is a 169 vehicle discrepancy between the records.

- Recommendation:** There should be a comprehensive fleet management system that includes a formal record of vehicles assigned to each department, service and fuel history, and other information. This record should either be the basis for the general ledger balance or should be reconciled with the general ledger at least annually.
- Cost Implications:** Included in capital expenses recommended in the Executive Summary.
- (6) Current Situation:** **Technical Training**
- Finding:** Current training programs do not meet the needs of the organization or the staff. Throughout Metro, mechanics and first line supervisors are in need of added training on technical issues.
- Recommendation:** All Metro fleet areas should strive for 40 hours per person per year of training. Metro Human Resources should assist the individual departments in obtaining the needed training.
- Cost Implications:** The costs for training are included in existing budgets.
- (7) Current Situation:** **Not All Mechanics Certified**
- Finding:** Several Metro departments do not stress mechanic certification. A recent survey of municipal garages indicated that almost 70% of mechanics were certified. TCI believes that all Metro departments should begin to stress certification.
- Recommendation:** Stress certification. Reimburse mechanics for tests. Provide assistance in obtaining test appointments and in obtaining study materials.
- Cost Implications:** Included in the existing budgets.

FIRE DEPARTMENT INTERIM RECOMMENDATIONS

- (1) **Current Situation:** **Clerical Backlog**
- Finding:** Certain functions have not been performed for months.
- Recommendation:** Ensure that the newly selected employee begins work immediately. Bring in temporary help to file and help clean up the area if this second person is not able to reduce the backlog within a reasonable time period. This clean up is necessary regardless of the long term reporting relationship of the Fire shop.
- Cost Implications:** None – this should be absorbed by budgeted positions.
- (2) **Current Situation:** **Lack of Fleet Management Reporting**
- Finding:** No fleet management reporting exists.
- Recommendation:** Until the previously recommended organizational and software changes are implemented, the Assistant Chief should determine the very few, critical areas for measurement. TCI recommends reports on vehicles pending repair, shop turnaround time, vehicle downtime, and PM status.
- Cost Implications :** None.
- (3) **Current Situation:** **Equipment Service Backlog and Staffing Level**
- Finding:** Equipment repairs are backlogged. Two mechanics have transferred to Fire Suppression.
- Recommendation:** Transfer part or all of the light vehicle maintenance to the General Service Motor Pool as an interim step, and use existing resources to catch up on repairs. Develop an ongoing list of repairs to be performed, and work through any safety-related repairs first.
- Cost Implications:** None for Metro as a whole. Motor Pool staff has existing capacity to absorb this additional work.

- (4) Current Situation: PM Backlog and Quality Level**
- Finding:** Preventive maintenance is backlogged. PM procedures, schedules and checklists are not documented. PM quality needs to be improved.
- Recommendation:** Develop a detailed preventive maintenance schedule by type of vehicle. Use PM checklists to actively and aggressively complete each PM. Train personnel on specific PM procedures. Ensure completion of scheduled PM's on a timely basis.
- Cost Implications:** None. Mechanic utilization suggests that this backlog can be addressed in-house with additional training and more efficient procedures.
- (5) Current Situation: Parts Inventory Management Lacking**
- Finding** The parts area is dark, unkempt, poorly labeled, and not well organized. No inventory records are kept. Many parts are acknowledged to be obsolete.
- Recommendation:** Clean out the obsolete parts and salvage them. Continue plans to establish separate areas by type of equipment and for fast moving parts. Keep inventory levels at a minimum.
- Cost Implications:** None. – mechanic utilization rates indicate this project can be absorbed in-house. Some salvage may be gained.
- (6) Current Situation: Financial Accountability**
- Finding:** The construction of the vehicle repair segment of the budget does not lend itself to cost analysis.
- Recommendation:** Separate accounts for vehicle maintenance from building maintenance.
- Cost Implications:** None

- (7) Current Situation: Low Management Standards**
- Finding:** Expectations are too low in many areas, including housekeeping, maintenance quality, preventive maintenance scheduling, safety, record keeping and parts storage.
- Recommendation:** Management needs to set higher and clearer expectations. Since the tasks are many and complex, the first steps need to be simple and straightforward. The shop and adjacent areas need to be cleaned up, debris needs to be carted away, and all safety and fire hazards need to be addressed.
- Cost Implications:** None. Mechanic utilization rates indicate this can be absorbed without additional labor cost.
- (8) Current Situation: Lack of Fire Engineer Support and Training**
- Finding:** Inspection of fire apparatus indicates that engineers are not performing checklist inspections or lack the training to properly inspect vehicles. Occasional cases of operator misuse were noted.
- Recommendation:** Develop an action plan, involving the Fire Academy and Fire Suppression management, to address this problem. Additional training and supervision of fire suppression personnel are needed. Disciplinary measures should be put in place.
- Cost Implications:** None.
- (9) Current Situation: Mobile Mechanic Program Not Properly Executed**
- Finding:** Inspection of fire apparatus indicates that the mobile mechanic is not properly performing checklist inspections or lacks necessary training to properly inspect vehicles. Information concerning this program has not been circulated to all of the fire halls.

Recommendation: Develop an action plan, involving the Fire Academy and Fire Suppression, to improve this program. Additional training and supervision are needed.

Cost Implications: None

MOTOR POOL INTERIM RECOMMENDATIONS

- (1) **Current Situation:** **“dBase” Information System**
- Finding:** The current system is flawed with internal inconsistencies and does not provide adequate data retrieval for decision-making. There is no programming support on site.
- Recommendation:** TCI recommended earlier in this report that a Metro-wide system be purchased and installed. In the interim we recommend that programming/problem solving personnel be available on site on a routine, agreed upon schedule that will meet Motor Pool’s day-to-day operating needs.
- Cost Implications:** None to Metro as a whole.
- (2) **Current Situation:** **Old Computer Hardware**
- Finding:** Some PC’s in use at Motor Pool are technologically obsolete.
- Recommendation:** Replace all PC’s with new or up-to-date used units, and equipped all PC’s with current software versions.
- Cost Implications:** We estimate that six machines are needed at an approximate cost of \$1,200, for a total cost of \$7,200.
- (3) **Current Situation:** **Police Support Group**
- Finding:** The Police Department deploys a group of eight people to supervise billing and repair operations and to monitor the flow of cars at the Motor Pool. This group includes six officers and costs approximately \$465,000 in salaries and benefits.
- Recommendation:** The number of Police personnel assigned to coordinate Motor Pool activities should be limited to two employees, and the uniformed staff can be released to perform law enforcement duties.
- Cost Implications:** None to Metro as a whole.

- (4) Current Situation:** **Reuse of Tires Removed from Police Vehicles**
- Finding:** Police policy does not permit the remounting of repaired tires on their vehicles.
- Recommendation:** Find ways to utilized these usable tires. Consider resale or reuse by non-critical vehicles.
- Cost Implications:** While exact cost figures are not available, new tire purchases of up to \$25,000 could be eliminated.

PARKS AND RECREATION INTERIM RECOMMENDATIONS

- (1) **Current Situation:** **Housekeeping and Building Maintenance Lacking**
- Finding:** The main garage area is littered and dirty, and safety violations were noted. A clean and orderly work area promotes a sense of professionalism that tends to be reflected in the work standards of the employees.
- Recommendation:** We recommend that the garage be cleaned and organized, that all be junk be discarded, and that all unsafe conditions be corrected. All old and salvaged vehicles should be surplused and sold on the on-line surplus property system. Steam cleaning followed by painting would result in a major improvement in the shop and office area.
- Cost Implications:** Much of the clean-up and light maintenance could be done with existing staff, given utilization rates. Steam cleaning and related supplies are estimated to be under \$5,000.
- (2) **Current Situation:** **Significant Building Improvements Needed**
- Finding:** The roof leaks, and the lights are inadequate. Other repairs are needed.
- Recommendation:** Have the Office of Facilities Management prepare an analysis of immediate and short-range needs.
- Cost Implications:** The roof repair and lighting should not exceed \$10,000. The costs associated with any other needed repairs are unknown.
- (3) **Current Situation:** **Manual Work Order System**
- Finding:** Maintenance records are inaccurate, incomplete, and/or non-existent.
- Recommendation:** Although the information system solution will be addressed Metro-wide, the Parks garage needs to correctly record information on the manual work

orders in the interim. This would include correct hours and parts costs.

Cost Implications : None.

(4) Current Situation: Maintenance Performed at Remote Sites

Finding: We have episodic testimony that some sites replace components that do not need to be replaced while others do little if anything to the equipment until they find that it is inoperable.

Recommendation: There should be a set of procedures written to establish and govern what level of maintenance should be undertaken at the remote sites and what common standards should be applied regarding automatic replacement of component parts. Parks management will need to enforce these new procedures.

Cost Implications: Although not readily estimable, this should reduce overall maintenance costs and cost associated with unexpected breakdowns.

(5) Current Situation: No Formal Scheduled Preventive Maintenance Program is in Effect.

Finding : The lack of scheduled maintenance leads to increased costs and in-service breakdowns.

Recommendation:

- (1).** Immediately schedule safety inspections of every on-road vehicle, beginning with those used to transport children and others. Take out of service and repair any unit found with defects.
- (2).** Create a manually scheduled, posted PM program. Schedule every vehicle for an oil change and safety inspection every 90 days. For this program to work, compliance with the schedule must be mandatory. PM cannot take a backseat to repairs. Deferring PM only increases the number of breakdowns. Publish

the schedule and involve operating management.

(3). Outsource repairs if needed.

Cost Implications : Overtime or outsourcing may be required to do this, but this effort should be able to be absorbed with existing mechanic capacity from one or more Metro departments. Once the fleet is current on preventative maintenance, costs should actually decrease, although this is not readily estimable.

(6) **Current Situation:** **Evidence of Equipment Abuse/Neglect**

Finding : Lack of operator training often results in equipment being used incorrectly that can result in damage. Lack of training also leaves the operator ignorant of routine operator maintenance that, if not performed, will lead to premature component failure.

Recommendation: Develop a training program for equipment operators directed at specific equipment. Involve operating management. Establish a process for discipline for incorrect operation or failing to perform operator inspections.

Cost Implications: None.

(7) **Current Situation:** **No Formal Inventory System**

Finding : Parts usage is not tracked or analyzed. Controls are minimal. Inventory management is minimal.

Recommendation: In the long term, TCI's recommendations on consolidating parts operations will solve this problem. In the interim, recording parts usage accurately and completely on the work order should be required, and inventories should be secured with limited, controlled access. Capturing, totaling and reconciling credit card parts purchases to inventory usage should also be implemented.

Cost Implications: Although not readily estimable, enhanced controls will reduce overall maintenance costs.

PUBLIC WORKS INTERIM RECOMMENDATIONS

- (1) **Current Situation:** **Inconsistent Management Reporting**
- Finding:** The Division is unclear about what should be measured and monitored.
- Recommendation:** Using this report, the Assistant Director should determine a few critical areas for measurement. The Fleet Manager then needs to develop timely and accurate reports to track performance against expectations. The expectations and reports should be shared with all staff and publicized.
- Cost Implications:** Although not readily quantifiable, this should reduce costs by focusing activity on key areas. Any system modifications needed are addressed below.
- (2) **Current Situation:** **Lack of Technical Knowledge**
- Finding:** Recent retirements have caused the Equipment Division to lose key knowledge. These losses impact the purchasing process for equipment and parts, as well as the actual maintenance of equipment.
- Recommendation:** Using this report, establish goals for improvement. Develop detailed maintenance guidelines. Contact the Motor Pool for assistance in defining guidelines for light vehicles. Contact vendors to obtain assistance in documenting checklists for other vehicles. Put supervisors and managers through development assignments and classes. The lack of technical knowledge and procedures are negatively impacting the quality of repair.
- Cost Implications:** None.

- (3) Current Situation: Fleet Anywhere System**
- Finding:** The current installation has some limitations, primarily in the area of reporting and customer support. Many of the problems blamed on the software itself are the result of problems with implementation, training, hardware, and systems support.
- Recommendation:** Make some inexpensive short-term improvements in hardware and support, including additional technical support of the system, the purchase of a Microsoft license to allow the system to be more reliable, and the development of additional key reports. It is important that the maintenance staff stays involved with these efforts and is comfortable with a system. Making the existing database more accurate will help with the start up of a new system.
- Cost Implications:** Costs should not exceed \$30,000.
- (4) Current Situation: Parts Inventory Management Lacking**
- Finding** Due to system shortcomings, a lack of confidence in the system, and system failures, it is currently impossible to properly manage the parts inventory.
- Recommendation:** For the interim, correct the system configuration and support problems. Resume the use of inventory reports.
- Cost Implications:** Included in the above financial implications.
- (5) Current Situation: Parts Procurement Problems**
- Finding** Communication and participation of mechanics is lacking regarding the selection of vendors.
- Recommendation:** Encourage greater line involvement in the procurement process. Perhaps assign mechanics to work in the parts area as a cross training assignment.
- Cost Implications:** Although not readily quantifiable, this should reduce overall maintenance costs.

- (6) **Current Situation:** **Parts Fulfillment Rate**
- Finding** Parts are not often available to mechanics at time of request. This has a negative impact on productivity and downtime.
- Recommendation:** Set higher goals for fulfillment. Consider re-instituting reorder points. Track results on a regular basis. Address the availability of parts on the night shift.
- Cost Implications:** Although not readily quantifiable, the financial impact should be positive. Mechanic downtime will be reduced.
- (7) **Current Situation:** **The PM process is Not Properly Controlled, Designed or Administered, and quality is poor**
- Finding:** Vehicles are not being maintained in a timely or adequately from a preventive maintenance standpoint. Vehicles operate with safety and significant repair problems.
- Recommendation:** Develop a detailed preventative maintenance schedule by type of vehicle. Use preventative maintenance checklists from weekend inspections to actively and aggressively complete each PM. Train personnel on specific PM procedures. Ensure compliance for scheduled PM's. Strive to raise PM to corrective repairs to a 50%: 50% ratio.
- Cost Implications:** None.
- (8) **Current Situation:** **Operator Training and Use.**
- Finding:** Evidence of operator misuse of Public Works equipment was noted; e.g. bent packer blades and cracked beds. Mechanics have many examples of burned out clutches or other problems caused by operator error. Truck cabs often contain significant amounts of trash.

- Recommendation:** Work with Public Works upper management to set higher standards. Develop feedback mechanism. Document each situation on work order.
- Cost Implications:** This can be implemented with existing staff. TCI estimates that well over \$20,000 a year in repair costs are caused by operator error.
- (9) Current Situation: Wash Bay Not Useable**
- Finding:** Public Works management has identified that their wash bay does not have proper drainage. Because of environmental concerns, it cannot be used as is.
- Recommendation:** An operating wash bay is essential to the fleet. This not only improves appearance, but also improves maintenance effectiveness by allowing detection of fluid leaks.
- Cost Implications:** The estimated cost to get the wash bay operational is \$200,000.
- (10) Current Situation: User Communication**
- Finding:** There is no scheduled or routine process to obtain user feedback.
- Recommendation:** Schedule regular meeting with key users, perhaps on a quarterly basis.
- Cost Implications:** None.

WATER SERVICES INTERIM RECOMMENDATIONS

- (1) **Current Situation:** **Lack of Fleet Management Reporting**
- Finding:** Inadequate fleet management reporting exists.
- Recommendation:** Given the long-term recommendations of this report, management should identify a few short-term improvement targets. TCI suggests focusing on PM maintenance schedules, pending repair status, and repeat service calls.
- Cost Implications:** None.
- (2) **Current Situation:** **Fleet Management Labor Reporting**
- Finding:** The practice of using flat or estimated rates to enter labor hours does not reflect labor actually utilized. Standards are not available for many tasks.
- Recommendation:** Enter actual hours used into the Hansen system and employ these hours to monitor utilization.
- Cost Implications:** None.
- (3) **Current Situation:** **Work Orders Not Used in the Garage**
- Finding:** The work order system is not employed in the garage operation.
- Recommendation:** Begin to print work orders for use by mechanics. Make service history available to mechanics, if easily done.
- Cost Implications:** None.
- (4) **Current Situation:** **Unused Parts in Inventory.**
- Finding:** Significant numbers of parts are not being used and are obsolete.
- Recommendation:** Salvage unneeded or unusable parts.
- Cost Implications:** Some salvage value should be obtained.

- (5) **Current Situation:** **Low Fill Rate in Parts**
- Finding:** There are too many parts being ordered by the Shop Supervisor and the Lead Mechanic. Work orders are delayed while waiting for parts.
- Recommendation:** Move more parts acquisition to the parts storekeeper. Stock all parts that have frequent turnover.
- Cost Implications:** Although not readily estimable, this should reduce costs and free up the Shop Supervisor to supervise the shop.
- (6) **Current Situation:** **Inventory Turnover Too Slow**
- Finding:** Significant numbers of parts are not being used frequently, and reorder points are too high.
- Recommendation:** Set reorder points at levels appropriate for usage and supplier service.
- Cost Implications:** Although not readily quantifiable, this should reduce capital invested in parts.
- (7) **Current Situation:** **Inadequate Records for Parts Removed from the Parts Room**
- Finding:** Parts are removed from inventory without proper records.
- Recommendation:** Develop a form for parts requisitions and instruct all current and potential users on proper use.
- Cost Implications:** Inventory controls will be enhanced, but the financial impact is not determinable.
- (8) **Current Situation:** **Financial Reporting**
- Finding:** The current method of transferring costs back to user groups distorts monthly financial reports.
- Recommendation:** Use a clearer method. Show the transfers as a separate transaction. Show current expenses at the detail level.
- Cost Implications:** Financial management will be enhanced, but the financial impact is not readily determinable.

- (9) Current Situation: Unused Equipment**
- Finding:** Significant numbers of vehicles are not being used.
- Recommendation:** Salvage all unneeded equipment before they deteriorate further.
- Cost Implications:** Positive – this will generate salvage dollars. TCI estimates that 35-55 vehicles are not in use. The salvage value should be \$25-50,000.
- (10) Current Situation: Maintenance Management Not in Place**
- Finding:** Vehicles are not being maintained in a timely or complete fashion. Many unsafe and mechanically unsound conditions were noted on operating vehicles. Poor PM results exist for the PM's being performed by Public Works.
- Recommendation:** Management of MWS should set specific performance objectives in the maintenance area. These should be monitored on a regular basis with the Fleet Manager. If dramatic improvements are not evident, outsourcing on an interim basis should be considered.
- Cost Implications:** None.
- (11) Current Situation: PM's are Often Delayed.**
- Finding:** Vehicles are not being maintained in a timely or complete fashion from a preventive maintenance standpoint. Vehicles are missing PM appointments.
- Recommendation:** Develop a detailed preventive maintenance schedule by type of vehicle. Review this checklist with Public Works. Insist that checklists be signed and faxed to MWS fleet. Routinely audit PM's. Send notice of no shows directly to the appropriate member of the leadership team. Provide information to MWS management on status and on failure of departments to meet PM schedules.
- Cost Implications:** Although not readily quantifiable, timely preventative maintenance will reduce overall cost.

(12) Current Situation:

Lack of Operator Training

Finding:

Inspection of equipment indicates that operators are not performing checklist inspections or lack the training to properly inspect vehicles. TCI's observations and inspections found obvious situations (low fluids, low tires, frayed belts, corroded terminals) of operator indifference.

Recommendation:

Develop an action plan, involving the operating departments, to address this problem. Additional training and supervision will be needed. Take appropriate disciplinary action on operators if needed. The MWS leadership team should address this recommendation.

Cost Implications:

Although not readily quantifiable, the financial impact will be positive in the long run. This would prevent non-scheduled repairs.

(13) Current Situation:

Inventory of Small Parts

Finding:

Certain inexpensive parts are carried on inventory.

Recommendation:

Charge inexpensive parts, such as fasteners, directly to expense as shop overhead or an expendable account.

Cost Implications:

Although not readily quantifiable, this will reduce record keeping time.

(14) Current Situation:

Battery Storage

Finding:

Replacement batteries are inventoried in two separate areas, neither of which is ventilated or properly marked.

Recommendation:

A battery storage area should be set up to comply with safety regulations.

Cost Implications:

Minimal investment should be made until all Metro recommendations are implemented. MWS should try to utilize existing space or shelving. Meeting safety and ventilation goals are a requirement.

- (15) Current Situation:** **Spare Vehicles**
- Finding:** Many spare vehicles and pieces of equipment are not in operating condition.
- Recommendation:** Spare vehicles must be maintained to a degree of safety, reliability, and appearance equal to everyday frontline vehicles. As mentioned, inactive vehicles should be scrapped.
- Cost Implications:** Although not readily quantifiable, this will reduce costs by making the maintenance operation more efficient.
- (16) Current Situation:** **Used Lubricant Storage**
- Finding:** The vessel used to secure used lubricants is improperly identified (kerosene), lacks secondary containment, and is not protected from nearby vehicular traffic.
- Recommendation:** Make the necessary improvements.
- Cost Implications:** The costs should be minor to mark the containers and to install surface level containment – less than \$500.
- (17) Current Situation:** **Mechanic’s Mixed Feedback**
- Finding:** The mechanics indicated that they did not have opportunities to express their concerns and share their feedback.
- Recommendation:** Schedule regular staff meetings to listen to mechanics’ concerns and explain operational issues
- Cost Implications:** None.
- (18) Current Situation:** **User Communication**
- Finding:** There is no scheduled or routine process to obtain user feedback.
- Recommendation:** Schedule regular meeting with key users, perhaps quarterly.
- Cost Implications:** None.

OTHER RECOMMENDATIONS:

Recommendations Relating to Vehicle Assignments:

(1) Current Situation: 24-Hour Vehicle Assignments are Inconsistent Within Metro

Finding : Practices vary among departments, and the current policy is outdated and not used by all departments. The use of vehicles and private tags are considered benefits and rewards for certain jobs. There are not adequate controls to ensure payroll treatment is in accordance with IRS regulations.

Recommendation: Review the current policy and practices, and ensure that all 24-hour vehicle assignments are in accordance with the existing policy and that the related payroll issues are appropriately addressed. Limit take-home cars to personnel subject to frequent callback or subject to occasional callback and in need of particular vehicles or equipment to respond. This should result in a reduction in the number of 24-hour vehicles, as well as identify a clear business purpose for the use of private tags.

Cost Implications : None, but a reduction in the number of take-home vehicles should result in overall savings.

Recommendations Relating to Radio Operations:

(2) Current Situation: Radio Operations are a Key Component of Fleet Management

Finding : Radio operations are an integrated part of the current motor pool and provide critical support to Metro users, notably public safety agencies.

Recommendation: The vehicle installation aspects of Radio Shop operations should be assigned to the new Office of Fleet Management.

Cost Implications : None to Metro as a whole.

Recommendations Relating to Parking/Traffic Violations:

- (3) Current Situation:** **Parking and Traffic Violations**
- Finding:** The Traffic Violations Bureau was not forwarding violations to the Motor Pool in a timely fashion. This limited the effectiveness of any follow up and left certain users with the misperception that they could ignore parking regulations.
- Recommendation:** The Traffic Violations Bureau should forward this information monthly to the Director of General Services so that user management can take appropriate action on a timely basis.
- Cost Implications :** None.

Recommendations Relating to Vehicle Replacement:

- (4) Current Situation:** **Inadequate Funding and Replacement of Police Vehicles**
- Finding:** The monthly rate charged for marked Police vehicles has been artificially low, which is depleting the Motor Pool fund balance. Replacement has been handled in an inconsistent fashion.
- Recommendation:** We recommend that Metro adopt a vehicle replacement funding and cost recovery mechanism that will adequately cover the estimated costs of new vehicles on an orderly and timely replacement schedule. Our suggested replacement criteria features use, age, and net replacement cost. Monthly charges to the users should be developed to recapture all costs.
- Cost Implications :** The current rate of \$335 per vehicle per month should be increased by \$591 per vehicle, and maintenance and other operating expenses should be billed as incurred. As discussed elsewhere in Chapter 1 of this report, varying implementation schedules will vary the financial impact.

Recommendations Relating to Fuel Management:

- (5) **Current Situation:** **No Centralized Records on Fuel Purchased, Stored, or Dispensed.**
- Finding :** Current fuel practices do not ensure management has central information about how much fuel is purchased, where and under what conditions it is stored, and to whom and in what quantity it is dispensed.
- Recommendation:** Centralized purchasing, control of storage, and monitoring of dispensing is essential. Control of all fuel functions should be assigned to the new Office of Fleet Management.
- Cost Implications :** None.
- (6) **Current Situation:** **Use of Gasoline Charge Cards**
- Finding:** Metro is providing gasoline through a network of 77 underground tanks. Metropolitan Nashville Public Schools purchases some of its fuel directly from a local retailer using a charge card system. The extra cost for this service is \$.109 per gallon, before considering the cost of maintaining 77 tanks, user drive time and inconvenience, the labor required to run the fuel system, and the cost of capital.
- Recommendation:** TCI recommends a detailed study to see if the long-term strategy of Metro purchasing and dispensing all fuel used is still correct. Options would be continuing to pump the majority of gas through Metro owned tanks, or converting at least a portion of operations to a fuel charge card system.
- Cost Implications:** Unknown without detailed study.

- (7) Current Situation:** **Experimenting with Alternate Fuel Vehicles**
- Finding:** With the exception of Nashville Electric, Metro has no program for alternative fuel vehicles. Although Metro is not required to utilize alternate fuel vehicles, there are positive reasons to develop an experimental program. NES is utilizing hybrid fuel and ethanol.
- Recommendation:** Metro should further explore the costs and benefits associated with alternative fuel options, particularly with regard to gasoline electric hybrid sedans and with regard to the Police Fleet.
- Cost Implications:** Unknown.
- (8) Current Situation:** **Supplying Gasoline to Not for Profits**
- Finding:** Metro allows two not for profit agencies to purchase fuel from the Metro fuel system. This appears to allow the agencies to avoid paying state gasoline tax.
- Recommendation:** Have Metro's Legal Department review this practice.
- Cost Implications:** None.
- (9) Current Situation:** **General Services Motor Pool and other Nashville Departments Purchase High-octane Fuel.**
- Finding :** There is no mechanical or other justification for Metro to purchase 89 or 93-octane fuel for its standard gasoline vehicles.
- Recommendation:** No high-octane fuel should be purchased unless recommended by the vehicle manufacturer.
- Cost Implications :** In the Motor Pool alone, the change to 87-octane will save over \$200,000 per year.

(10) Situation: No Central Records Are Kept Regarding Metro Fuel Storage Tanks

Finding : Federal and State law and regulations mandate that records proving compliance with environmental rules be kept and accessible. Although Metro appears to be in compliance with the environmental requirements, the records supporting this are not centrally maintained or readily accessible from the various departments responsible for the tanks.

Recommendation: Centralize control of all underground storage tank records, and centralize the responsibility for the periodic testing through the new Office of Fleet Management.

Cost Implications : None.

Recommendations Pertaining to Insurance:

(11) Current Situation: Documentation of Insurance Procedures/Rates

Finding : There is confusion on the part of owning departments relative to the insurance pool; it's operations, and the related charges. Additionally, insurance charges for General Fund departments are not reflected in departmental budgets.

Recommendation: The procedures should be documented clearly in agreements and explained to owning departments. Both the Insurance and Safety groups and the Motor Pool should ensure that owning departments understand how vehicle insurance works and what the departmental financial and other responsibilities are in the event of an accident. Insurance premiums should be included in Motor Pool charges to departments, with Motor Pool remitting premiums to the Self-Insurance Fund.

Cost Implications : None for Metro as a whole.

(12) Current Situation:

Collision and Comprehensive Coverage

Finding:

It is difficult for owning and using departments to anticipate and budget for losses. The variable deductible creates confusion. TCI believes that a deductible is important, since it reminds the user of the cost involved in a loss. However, a fixed amount deductible would simplify understanding and handling. Additionally, the absence of collision coverage creates a burden on departments when there is an accident. If the deductible is in place to influence the owner departments relative to operator safety, TCI believes that it is not effective.

Recommendation:

Consider adding collision coverage through the self-insurance fund.

Cost Implications:

There would be additional costs for administration and for additional actuarial services should Metro decide to insure collision.