Note: The following is an annual report to the TPC and Common Council from Catherine Debo, Metro Transit General Manager.

Report: Metro Progress Report on 2004-2009 State Performance Audit [1] Recommendations (6/5/2012)

In March 2004, the State of Wisconsin completed its Transit System Management Performance Audit of Metro Transit (Metro), a task performed every five years. The report, prepared by Abrams-Cherwony & Associates, as lead consultant to the State, noted that:

1. Metro is a very efficient and effective organization.
2. Metro provides a much higher level of service on a per capita basis compared to transit systems with similar service area populations.
3. In much larger communities with similar levels of transit service, Metro continues to out-perform those "peer" transit systems in passenger trips/capita and passenger trips/hour.
4. Among its peer transit systems, Metro is tied for the lowest General and Administrative cost and number of General and Administrative employees.
5. Metro's cost per rider is less than the peer system average.
6. Metro's farebox recovery and average fare is trending downward as fares are not keeping up with costs.
7. Metro performs better than the peer group average in all measures related to transportation effectiveness.

Every five years, the Performance Audit provides recommendations for continued improvement of service. Metro reports annually to TPC and Common Council on the status of the recommendations.

A. Policy and Decision-Making Process

- **A separate Transit Commission should be established in order to give transit issues their proper review. Parking and taxi ordinances should be assigned to other oversight committees.**
  No action has been taken by the City to accommodate this recommendation. The Transit General Manager and Traffic Engineering Manager (who oversees Parking Management) have both noted the difficulty in accommodating detailed areas of discussion necessary to accomplish, in timely manner, needed oversight and action on topics addressed within the framework of TPC meetings. Transit Commissions, specific to the purpose, have been established in all areas of the State where transit is provided, pursuant to State Statute, with the exception of Madison which remains anomalous in its approach. Creating a Transit Commission would allow more effective oversight and discussion of transit-related issues. It may also be provide an opportunity to acknowledge the regional nature of the services provide by Metro by incorporating Metro partnering communities in the composition of the Commission.

- **Options should be presented for TPC to improve the decision-making process.**
  Examples of extensive discussion and detailed options provided include materials used in considering service efficiencies, service cuts, auxiliary income, and fare structure changes.

B. General Administration

- **Conduct a Facility Needs Assessment Study and follow-through with facility expansion and renovation**
  The first phase of the Needs Analysis Study has been completed – the Master Plan. The second phase is about to begin – Schematic Design. Elements for facility expansion and renovation have been included for the past *five years* by Metro in its capital budget recommendations to the City, and most recently in the Madison 2006-2011 capital budget plan. If initiated soon as hoped, planned facility improvements would take 2.5 years to complete. Metro is willing to work with the City to incorporate facility improvement plans in a longer phasing plan if necessary to accommodate this critical purpose.

- **Evaluate the positive and negative impacts from a service, financial, and organizational standpoint of remaining a division of the City of Madison.**
  Of course, this is not something that Metro, as a Division of the City can accomplish on its own. We need the full support of the City and suggest the possibility of transitioning to a Regional Transit Authority by first creating a Transit Commission integrating our municipal partners. As Metro continues to reach out to additional communities, the regional nature of Metro services becomes more and more apparent.

[1] The State's Performance Audit for Metro was completed in March, 2004.

- **Continue Metro initiatives to overcome shortfalls of the City IS system through development of in-house data bases and acquisition of new in-house software.**

  Metro has pretty much overcome problems with the City's limited financial software by developing its own computer software programs to be able to eliminate duplication of effort and organize information in ways required for federal, state, contractual, and other purposes. However there remain some continuing issues and duplicated efforts. Metro uses many data-base programs and has obtained extensive transit-specific software to accommodate its many data management/analysis needs – which are managed by in-house IS staff.

  Metro and City IS work well and cooperatively together in a number of arenas including,

  - hardware selection and acquisition,
  - sales of fare media via the Internet,
  - support services offered by City IS in city-wide software programs,
  - technical support provided by City IS for development of the web portal that our paratransit contractors will use to report on contracted out service,
  - participation by Metro IS and City IS in selecting an Enterprise-level reporting tool for use city-wide which we anticipate will give Metro access to Metro data contained in other City databases, and
  - potential future collaboration with a new GIS info specialist to be hired by City IS.

- **Involve all units at Metro in budget development process.**

  All members of the Senior Management Team (SMT), who meet weekly, are involved in budget development discussions and other budget-related discussions throughout the year. Each Unit Manager receives a monthly Unit-specific financial report comparing budget with year-to-date actuals in a much-improved format. Additionally, members of the SMT are routinely involved in detailed one-on-one discussions with the Finance Manager for various elements of the budget.

- **Metro Transit should continue to make the City aware of the importance of establishing conservative wage and benefit objectives in the context of future city-wide labor negotiations.**

  Metro management took a lead role in promoting establishment of conservative wage and benefit objectives with the Mayor and BOE for labor negotiations in the past several years. This has been a matter of absolute necessity to Metro in being able to maintain service levels and has been of benefit to the City as a whole from a budget perspective. Metro's last three labor agreements (for which the last one extends through 2007) have set or supported important city precedents in:

  - offsetting benefit improvements with lower wage agreements;
  - expanding opportunities to contract out services;
  - expanding use of part-time employees;
  - eliminating workers compensation supplementary insurance (used elsewhere in the City);
  - eliminating duplication in family health insurance coverage; and
  - tying wage increases to health insurance premiums cost (2006/7),

  among other labor agreement improvements.

- **Pursue the goal of developing an annual evaluation process within Metro Transit.**

  It is an anomaly in Madison that there is no direct connection between wage increases and performance. In many municipalities and organizations there is a direct connection between wages/benefits and performance. An evaluation process has not been developed at Metro and in many other departments/divisions as a result. We continue to carefully monitor the performance of new employees during the six month probationary period. In Operations and Maintenance units within Metro, one-on-one discussions with bargaining unit members concerning performance are commonplace and are well-documented. In General Administration, Planning, Marketing, Finance, and IT units, staff meetings within the units are routine and generally happen on a weekly basis. Senior Management Team members meet weekly to communicate objectives, etc. Training and re-training programs offer opportunities for advancement and improvement. Advancement in re-classification is based on merit (i.e. performance). But there is no annual or semi-annual evaluation process per se. It is a recommendation which Metro staff should pursue in the future.

C. Finance

- **Variable cost modeling should be used to predict costs for adding and deleting services.**
  - Revenue return per route: Metro uses exact revenue return from each route (based on the level of receipts of each individual type of fare payment) in billings to municipalities/entities for service and develops estimates for future services based on revenue return experience from similar services. Our new fare collection equipment, introduced on July 1, 2005, will enhance the accuracy of this data and make it substantially easier to obtain.

- Variable costs are used in budget development on a per hour and per mile basis according to transit industry standards and are used for developing estimates for expansion and reduction of service.

D. Marketing and Customer Service

- **Explore strategies to update the phone system to track calls, gaps in data reporting, distinguishing between different types of calls, and the duration of busy lines.**

  Phone reports are now produced monthly. The Metro Customer Service Center answered 10% more calls in 2004 than in 2003, the number of abandoned calls (i.e. people tired of waiting) dropped 51%, and callers received 1,407 fewer busy signals than in 2003. The average wait time is about 1.25 minutes, a reduction from the past.

  Even though use of Metro's website to obtain information increased by 75% from 2003 to 2004, and continues to increase, our phone volume increases as well. Since paratransit trips have grown by 7-8% in 2005, so too do the number of paratransit customer calls for reservations.

  Our CSC phone system (as is true of all of Metro) was a used system, purchased approximately 8 years ago. Unlike newer systems, its software is proprietary and therefore not easy to manage. Although our individual telephones are relatively new equipment, the underlying software is not. We anticipate addressing the issue of a new system in the context of upgraded "smart" facilities we hope to build within the next few years. New technologies are available and should be considered in that context.

E. **Safety Management and Training**

- **Designate specific staff members to facilitate accomplishment of the safety management and training tasks.**

  The Transit Service Manager oversees Safety and Security issues at Metro. The TSM actively participates in Health and Safety meetings composed of representatives from the various units within Metro. A designated Operations and Maintenance Supervisor has been assigned greater responsibility for safety management within those units. Each attends monthly Workers Compensation meetings with reps from HR and the WC administrator, as do Metro's Transit Service Manager and Personnel Coordinator. The designated Operations and Maintenance Supervisors meet one-on-one each pay period with employees in their unit who are off work on WC and see that any applicable safety training for the employee is conducted upon return-to-work. The City Safety Coordinator conducted two training sessions in 2004 for Metro Supervisors to instruct them in providing "on the spot" safety training to employees, and in documenting all training provided.

- **Ensure that all desired elements have been integrated into Metro's training and re-training programs.**

  An Operations Supervisor has been designated full-time Training Supervisor for operations employees. That Supervisor, with specialized assistance from other employees, has re-designed Metro's on-going training program for new employees and is in the process of updating materials used for Metro's re-training program for current bus operators. Improvements in evaluation of employees during probation have been made to perform mid-probation review and end of probation meetings with new employees to ensure a better prepared Operator.

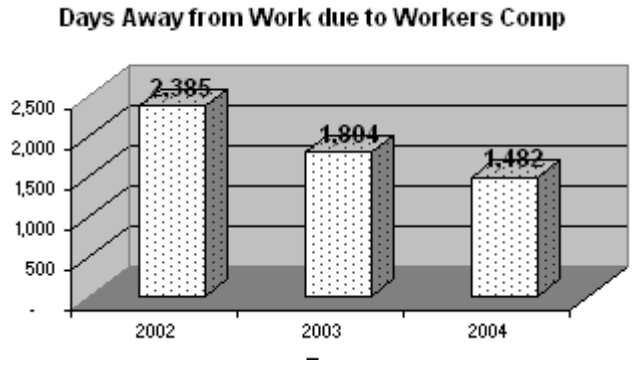
  Maintenance has an extensive on-going training and re-training program for its employees. Other units within Metro – General Administration, IT, Finance, Planning, and Marketing - all have in-house training for new employees, regular staff meetings, and provision for continued professional training through City, County, FTA, and transit industry programs.

- **Prioritize the completion and adoption of a Safety & Security Program Plan that is consistent with the advisory guidelines issued by FTA.**

  The Transit Service Manager oversees Security issues at Metro. A security program has been developed for different levels of alerts per FTA guidelines. Assignments for Operations Supervisors have been shifted among employees, such that Security has become a major responsibility for a designed Operations Supervisor within the Operations Unit, consistent with FTA recommendations for hand-on involvement by operational staff. This designated Safety and Security Supervisor attends the meetings of the City of Madison Emergency Planning Team which is currently "Madisonizing" established FTA response programs for emergencies and terrorism events. Metro staff is also involved in research and planning with the Wisconsin Urban and Rural Transit Association (WURTA) on system security issues. Eventually, Metro would like to expand its Operations staff to hire a full-time professional with Security background to oversee this responsibility.

- **Incorporate passenger and service related issues into Metro Transit's Security program, including development of public info materials that delineate appropriate safety and emergency preparedness measures while using transit services.**
  Car-cards have been installed on all buses instructing passengers in security issues. Security messages have been included in Rider Reader newsletters, distributed on buses and via Rider-Alert e-mails.

- **Monitor the trend of workers' compensation costs and determine if there are additional measures that can be taken to reduce these costs.**
  Metro's WC experience has improved substantially in recent years as can be seen in the graph shown below. In 2003, Metro was the first (and only) city department/division to negotiate elimination of Workers Compensation Supplemental Disability Insurance in its labor agreement with operations, maintenance, and clerical staff. In 2004, Metro management developed a very extensive plan adding eight additional internal requirements for Metro staff to further reduce WC costs. Each of these requirements has been instituted.



F. Maintenance

- **Development a program to remove mud from floor of buses.**
  A maintenance supervisor has been assigned to update the bus cleaning process to address the problem of mud on bus floors in muddy weather. The current cleaning process captures most of the slushy water and dirt through powerful vacuums, but not all. The cleaning process was last updated in 2001 with the acquisition of low-floor buses.

- **Upgrade Maintenance software programs to incorporate the following functions:**
  A number of recommendations are predicated on the purchase and implementation of new maintenance software to replace our outdated Fleet-mate program. The present program limits the amount of useful information that can be extracted for trends analysis, etc. Maintenance staff spends quite a bit of time correlating info on vehicles, mileage, parts usage, parts longevity, and road call statistics in order to implement its Preventative Maintenance Program. A new software program would streamline this process. We anticipate purchasing a new software package, budget permitting, as soon as possible.

    - **Compare fleet types through software program to compare down-time.** See above.

    - **Implement parts ordering software to close parts work orders in a more timely fashion, so the cycle count program can be formalized and bar coding and other features can be incorporated.** See above.

- **B&G should develop a formal preventative maintenance inspection (PMI) program for all major building systems (HVAC, Boiler, etc.), incorporating these systems into new software monitoring programs.** The Building and Grounds Unit would benefit significantly from the new maintenance software program. In the meantime, B&G staff have been working closely with Metro IS/ITS staff to develop and use a Microsoft Access program tracking major building systems and related support equipment. The info is being downloaded to this Access program and, in addition to this program's current usefulness, will eventually serve as the basis for the data to be used in the new software system. The B&G Foreman manually tracks and schedules a PM program for building systems and support equipment including boilers, pumps, air compressors, HVAC units, fuel dispensers, bus washers, bus vacuums, hoists, bus stop shelters, transfer points, forklifts, sweepers, mowers, trailers, and trucks.

- **Complete the plan to remodel the entire parts facility and in so doing address better security and access control to the parts room.**
  Our new facility expansion and renovation plans address the many shortfalls of current maintenance space, including better security and access control to the parts room.

G. Operations

- **Further develop performance indicator program to incorporate internal indicators for staff review.**
  Operations staff continually monitors employee on-time performance (for reporting to work, schedule adherence, etc.), the amount of Guaranteed time paid (purpose is to minimize), any Unscheduled Overtime, Sick Leave Usage, Attendance, Complaints & Commendations, Accident History, Training and Retraining History, Workers Comp usage and status. This information is used to determine what, if any, intervention is needed to improve employee and system performance. Various software programs and some manual accounting is used to monitor these elements. A new Trapeze Bid Dispatch software system is in the process of being implemented and will become the repository of all of these elements in the future, making current monitoring more efficient and less time-consuming for analysis purposes.

- **Train operating supervisors/dispatchers in maximum use of the AVL equipment for tracking of buses, drivers, communications, accuracy of info received.**
  Operations Supervisors/dispatchers have all been trained and continue on-the-job-training with the new radio (voice/data) and AVL system. Supervisors monitor a wide variety of real-time reports generated by the new system, such as On-time Alerts, Off-Route Alerts, Excessive layover Alerts, vehicle location of each bus and service vehicle, schedule adherence, driver sign-ins, voice and data communications from drivers, etc. Supervisors have used playback capabilities of the system extensively to research complaints concerning vehicle location/on-time performance. Time-permitting, a formal training program should be developed to assure that all Supervisors are knowledgeable in the full operating capabilities of the system. At present, some supervisors are more knowledgeable than others because they work with the information more often.

- **Expand staffing time for fixed-route dispatch radio system in the evening and use that person to handle incoming calls for paratransit to evaluate service change requests and provide confirmation if the change is feasible.**
  Staff schedule adjustments have been made in Operations to provide Radio, AVL and telephone coverage from 4am to later in the evening to 12:30am in order to monitor and handle fixed route and paratransit needs.

H. Planning and Scheduling. (Note: many tasks were identified by the Consultant to address the new radio (data and voice) system, AVL system, and fare collection equipment which, at the time the report was issued, were soon to come on line. Since then, these systems have been installed and are operational to the extent described below).

- **Development of a data collection and management plan to accommodate new Automatic Passenger Counters (APCs), Automatic Vehicle Locator (AVL) technology, and higher tech registering fareboxes.**

  Operations and Planning personnel have continuous access to the AVL database for use in monitoring drivers and route performance, scheduling, passengers boardings, etc. They are using the data extensively. An Access database has been created to facilitate analysis of data. Data from new fare collection equipment is automatically downloaded when buses enter the garage and is routed to a computer for planning to use in reviewing, collating, and summarizing fare collection and schedule data.

  Even though the AVL system is very new, planning staff has been able to use the play-back feature of the AVL system to review run-time data and revise bus schedules. As a result, a number of schedule efficiencies are being introduced into the fall '05 Ride Guide (soon to come out). This type of analysis will be an on-going effort. Further accuracy and efficiency will be integrated in route schedules with each new issue of the Ride Guide.

  APC-equipped buses (40 of Metro's 199 fixed route buses) are assigned on a rotating basis that results in 100% run (bus trip) per route coverage in 4 days. The cumulative data, collected in this fashion starting in January 2005, is frequently used in helping staff develop plans concerning location of bus shelters, analysis of boardings to the bus stop level, etc. While APCs have been shown to be accurate in boarding data, alighting data has been found to be inaccurate. Staff is working with Siemens on this. It is an element which other transit systems with this same equipment are having trouble with as well. When those technical issues are worked out, staff will have access to passenger load information (i.e. how many people are on the bus at any one time for each segment of a route) which will be very useful to route planning and operations purposes.

- **Increase staffing to accommodate analysis of a large data base.** Metro's Five Year Staffing Plan calls for another Planner position in 2006 to provide support in programming and data management associated with the AVL/APC system. This will be difficult to accomplish in light of a projected budget deficit and Mayoral directive for a 3% reduction in the City's share of Metro's budget.

- **Continue to explore modifications to existing services in a planned, incremental approach and follow a formal deliberative process in planning modifications to existing services.**
  The overall service planning approach has shifted from network re-structure to refinement of the system on a sub-area basis - an approach that lends itself to in-depth analysis and minimizes passenger disruption. Areas for study are established in the TPC-adopted Annual Strategic Plan and incorporate customer feedback, service requests, known deficiencies, city expansion, and other external data. The planning process is modified as necessary to incorporate other demands for service changes related to budget, lack of adequate funding to retain service levels, specific requests for survey data/focus, or new conditions that require immediate response.

  In 2003, major improvements were made to the Eastside/south quadrant section of the service area where there has been significant growth and long-standing service improvement requests.
  Currently, per the Annual Strategic Plan, staff is focused on development of a West-side route re-alignment plan to enhance efficiency and effectiveness of the route network in that area.

  In the fall of 2005, service is being expanded to Verona after several years of planning.

  Metro's Service Development Committee (SDC) meets weekly to review data, discuss service issues, and guide the progress of service planning by the Planning staff. The Committee is chaired by the General Manager, and consists of planning, marketing, and operations staff.

- **Develop a work program to indicate planning activities to be accomplished.** The Planning Unit work program is part of the Annual Strategic Plan.

- **Utilize the data from the AVL system to develop on-time performance standards.** On-time performance is monitored in real-time by Operations personnel in order to take immediate corrective action as necessary to maintain on-time route performance. The system generates automatic "Alerts" notifying Operations Supervisors of off-route, early and late buses. Planning Unit personnel review on-time performance through a play-back feature of our new AVL system, in order to develop improved passenger schedules and to obtain further information for route planning purposes. On-time performance standards will evolve from these efforts for inclusion in future monthly performance indicator reports.

- **Consider adding farebox recovery and subsidy per passenger to the route level monitoring process.** Our new fare collection system will facilitate such an analysis on a routine basis for use in route planning and marketing purposes.

  Maximize use of AVL system to obtain boarding, alighting, and passenger load data in lieu of "ride checks".
  Staff efforts are currently focused on calibrating APC and AVL systems to assure the accuracy of the data. Boarding numbers are currently used quite extensively for route planning/analysis purposes. While APCs have been shown to be accurate in boarding data, alighting data has been found to be inaccurate. Staff is working with Siemens on this. It is an element which other transit systems with this same equipment are having trouble with as well. When those technical issues are worked out, staff will have access to passenger load information (i.e. how many people are on the bus at any one time for each segment of a route) which will be very useful to route planning and operations purposes. Staff is exploring the best method for compiling automatic ride-check data and producing passenger load profiles, either with internally developed reports or with proprietary software.

- **Efforts should continue to utilize the windows-based version of Trapeeze.** The Scheduler continues to use the DOS version of Trapeze for schedule and runcut development and then transfers the data to the Windows version, which is the database for the AVL system. The biggest drawback of this approach is the re-work associated with data transfer and editing. The Scheduler prefers the DOS-based version for the flexibility it offers in scheduling. As time goes on, the Scheduler is learning to overcome the shortfalls of the Windows-based system and uses it for more and more purposes.

- **Once all modules of the scheduling software are installed, increased use of Trapeze as an analytical tool should be explored.** The Trapeze Bid-Dispatch module has recently been installed but is not yet fully operational. Operations staff have been trained and expected to go on line in September with parallel operations, using Bid-Dispatch and the current computer program to assure accuracy of the system. Once fully operational, information from the Bid Dispatch and FX scheduling program together will provide a means of doing more efficiency analysis. Trapeze schedule data in the AVL system is currently being used for run-time studies.

- **Pay/platform ratios should be monitored.** Pay/platform ratios are currently run as driver "picks" are developed. As soon as the Bid Dispatch software is up and running, Operations will be able to monitor Pay/platform ratios on bi-weekly and daily basis. This information used to be developed manually on a bi-weekly basis, but was found to be too time-consuming to be worthwhile until the Bid-Dispatch system can produce the information routinely as one of many regular reports.

- **Continued active involvement of the Scheduler in the service development process and in manpower planning.** The Scheduler is a key member of the standing Service Development Committee which meets weekly. The Scheduler has long had a key role in service development planning and to that end the position was re-classified some years ago and re-named Schedule Planner. The Scheduler takes a lead role in route design because of the schedule complexities of the route network.

- **Use of a time line associated with a schedule service change and a new run-cut.** The tasks involved in scheduling service changes have been identified and compiled for lead-up and follow-through activity with each service change. The Service Development Committee reviews the tasks regularly during the planning process to ensure coordination of activities among units and timely completion of all tasks.

I. **Paratransit Service**

- **Formalize monitoring of on-time performance beyond the practice of relying on customer reports.**
  Metro currently uses its AVL system to closely monitor paratransit service directly provided by Metro. We are in the testing stages of implementing an internet data portal for contractors to report their trip performance back to Metro. The information will be transferred to Metro's Trapeze database to create on-time performance reports for contracted service which will be identical to the reports generated for Metro directly-provided paratransit service.

- **Tighten up the scheduling process, continuing Trapeze software optimization that has already been accomplished.**
  Metro's AVL system is helping staff tighten scheduling for Metro directly-provided paratransit service. The AVL system provides global vehicle positioning and real-time performance data for dispatchers to monitor. As drivers and dispatchers become more familiar with the capabilities of the system, additional efficiency and service benefits are anticipated.

  Additionally, Metro Staff has pursued the task of "templating" standing ride requests. Templating is the Trapeze process of maintaining trips assigned to the same schedule on a recurring basis. Templating results in greater service consistency and efficiency for both the customer and the contractors. The manner in which Metro has been maintaining templates has proven to be labor intensive. Staff has developed another means through an innovative RFP for service, which has been published recently. This will allow provide a means for contractors to test an alternative means to template rides and achieve the same optimization results.

- **Focus more time on educating ADA eligible riders on how to use fixed-route bus service.**
  Metro's Marketing and Customer Service Unit is actively working with seniors and community service agencies to promote fixed route services. The ADA Transit Subcommittee recently updated its duties to include outreach. In the recent past, Metro has worked with Easter Seals to "Train-the-Trainers" who work with specific paratransit riders to learn to use the fixed route system.

- **Expand staffing time for fixed-route dispatch radio system in the evening and use that person to handle incoming calls for paratransit to evaluate service change requests and provide confirmation if the change is feasible.**
  Supervisor schedule adjustments have been made in Operations to provide Radio, AVL and telephone coverage from 4am later in the evening to 12:30am in order to monitor and address fixed route and paratransit needs.

- **Expand performance indicators for Paratransit Unit to check schedule adherence and road call rate.**
  The implementation of the AVL system with Mobile Data Terminals on-board Metro-operated paratransit vehicles has made close supervision and monitoring of schedule adherence easier. As mentioned above, the data portals for contracted service will allow Metro to create baseline stats for on-time performance by contractors as well. Once the data can be evaluated and compared to standards established by ADATS (formerly ADAPPOS), reports can be generated on these indicators.

- **Explore options for reducing paratransit costs.**
  Metro staff recently developed innovative changes in RFPs for the next contracting period designed to address this issue. As a result, it appears that we may have as many as seven bidders (rather than three) for some portion of our contracted-out service, a good sign that costs may be attenuated.