

## **Management of In-Service Breakdowns**

The minimization of service disruptions due either to bus breakdowns or other causes is a major focus of effort for the MTA, as it is in most transit systems. Efforts to prevent service disruptions consist largely of efforts to assure that both the driver and the bus are ready for service. Efforts to reduce the impacts of any disruption for any cause generally focus on a series of preventive and remedial actions, including:

- Assuring that all drivers are fit for duty
- Assuring that all vehicles are properly inspected and maintained
- Holding vehicles that are due for inspections out of service
- Assuring that all vehicles assigned for service are ready for service
- Assigning vehicles to tripper service that are in need of midday running repair
- Assuring that all drivers complete their “walk around” inspection of vehicles before they leave the yard for revenue service as a safeguard against having a defective in service
- Maintaining radio communications with drivers in service
- Trouble shooting in-service problems with the driver and solving minor in-service problems, by radio
- Leaving buses with non-critical problems in service, at least until a relief bus can reach the scene of the problem, or until the mid-day or evening pull-in periods
- Having replacement vehicles available for service if required both for breakdowns as well as for delays, heavy loads, or other unexpected needs

Other safeguards against undue disruptions include leaving buses with minor defects in service and having maintenance personnel meet the vehicles at layover points and make repairs. Any bus, however, with a safety-related defect or with malfunctioning air conditioning is pulled out of service immediately and replaced with a substitute vehicle. All of the current fleet is air-conditioned.

A summary of recent road call rates for the last three months of 2000 for various components of the fleet is summarized on Exhibit 18-1. As these figures indicate, the average miles between failure for the quarter was approximately 4,000 for the fleet, with individual subfleets rates ranging from a low of 1,652 for the Trolleys to a high of 14,331 for the newer RTS buses. This average is well within an acceptable range. It should be noted, however, that industry reporting practices for this number are highly variable. Some systems report almost any defect as a “failure” where others take a more conservative approach.

The systems that are in place to minimize service disruptions are well thought through and well executed.

There was no reporting for failures by fleet by components. This type of reporting permits a more systematic and active approach to failure management. It can provide insight into recurring problems within a subfleet and expedite a mass correction. This level of sophistication will improve failure rate averages for the entire system.

We did not see any evidence of specific campaigns to remedy failure by cause by subfleet.

**Conclusion**

Failure rates at MTA do not appear to be unusual and are well within an acceptable range based on industry standards.

**Recommendation**

The MTA needs to develop and maintain a report that indicates failure by fleet by component. This will help MTA develop campaigns to remedy failure by cause by systemic subfleet issues.

**Cost Estimate**

None.