

2. Vehicle Operators
3. Customer Service
4. Maintenance – for monitoring mechanical alarms and other maintenance-related functions of the system
5. SEPTA Management – for accessing reports and occasional view-only access to system displays
6. CAD/AVL System Administrators – for managing and monitoring the CAD/AVL System.

1.2. GENERAL REQUIREMENTS

A. **CAD/AVL System Scalability** - The CAD/AVL System shall initially support the functions specified herein with the quantities of vehicles, devices, workstations, depots, and service parameters defined herein. However, the system shall be easily scalable over its estimated 15-year lifetime to support 15% additional vehicles, users, workstations, and transit facilities without replacement of initially installed components, including both hardware and software components.

~~1. The CAD/AVL System shall, over its lifetime, interface to the ultimate number of vehicles and users specified herein.~~

B. **Functional Expandability** - The CAD/AVL System shall be designed to permit the addition of new functional capabilities over its lifetime without replacement of the initially delivered components. In particular, functions designated in this Technical Specification as “Future” shall be able to be readily added to the CAD/AVL System during its lifetime without rework or replacement of initially delivered system components.

C. **Contractor’s Standard, Service-Proven Products** - Contractors shall provide standard, unmodified, service-proven products of computer and communication equipment manufacturers, established third-party hardware and software suppliers, and their own baseline product offerings where they meet or exceed the functional requirements of this Technical Specification.

D. **Adjustable Parameters** - Computer programs typically reference a number of variables that must be given specific values during the execution of the program. These variables, or parameters, require adjustment from time to time.

1. All parameters in the CAD/AVL System that may need to be modified to accommodate changes in SEPTA’s service and operations shall be adjustable by authorized CAD/AVL System users. At least three levels of parameter adjustment shall be provided, as follows: