



## 60.1.1 Introduction

Traffic management systems are composed of hardware and software system as well as communications and networking systems. Computers play a primary role in controlling and managing the Wisconsin system using a client-server approach.

Servers provide services to client workstations allowing operators to work with software that performs important system functions while hiding much of the implementation and details from the user. It is the server that handles where data is stored and in what format, handles communication to a dynamic message sign per the sign manufacturer's requirements, handles changes to ramp meters or providing a web page that an authorized user can utilize to control/manage the system.

Servers save money by consolidating and managing these issues. They also provide scalability and economics of scale by reducing the need for additional computing equipment.

Software for traffic management systems are not the type of software you can purchase "off-the-shelf" and use immediately. There are many system configuration choices and requirements based on the system design that require a level of customization. Software needs to support many different types of field equipment (e.g. dynamic signs, 2070 controllers, low power AM transmitters, flashing beacons, cameras, etc.) from many different manufacturers.

There are generalized needs like database management, video and communication systems but the majority of the systems are specific to traffic management and have different requirements than typical office environments.

## 60.1.2 Needs Assessment

When new software and servers are being considered a needs assessment is typically completed to determine the functional requirements of the equipment needed. The types of needs being assessed can vary, but at a minimum the data management needs, end user needs, and business/reporting needs are reviewed.

## 60.1.3 Types

Guidelines for choosing the type of software and related hardware are highly dependant on the complexity of the project. For specific procurement product information, see Chapter 70.5 State Supplied List. Contact the STOC for product information.