

Gateway Building

Install Variable Speed Drives

The existing five air handlers are variable-air-volume (VAV) units that utilize inlet guide vanes (IGVs) to vary the flow of air to the VAV boxes. We propose to replace the function of the IGVs with variable speed drives (VSDs). The IGVs will either be locked in the full-open position or removed entirely, if feasible, their function replaced by VSDs. The VSD will vary the speed of the fan motor and reduce the amount of electricity consumed by the fan motors. The existing static pressure sensor will be used to control the speed of the VSD.



Exterior of Gateway building, illustrates glass where window film will be installed

Cooling Tower Fan

The existing cooling tower operates with two speeds to provide additional stages of operation for the cooling tower. In this measure we propose to disconnect and abandon in place the smaller motor and install a variable speed drive on the main tower fan to control tower operation. As the load decreases on the cooling tower (i.e., reduced airflow), the controls (temperature of water leaving the tower) will reduce the speed of the fan and reduce the amount of electricity consumed by the fan motors.

Please see Scope of Work Section in the appendix for a detailed list of locations and associated upgrades.