CALCULATING THE ACCESS DEFICIT

In this appendix, we use the equations laid out in the previous appendices to calculate the access deficit in any given scenario. We write the access deficit as

$$AccessDeficit\left(sys, year, fees\right) = Unconstrained\_Enrollment(sys, year)$$
$$- Constrained\_Enrollment(sys, year, fees)$$

(E1)

Here, the unconstrained enrollments are given by

$$Unconstrained\_Enrollment(sys, year) =$$
$$FTF(sys, year) + cHLD_1(sys) * FRS(sys, year - 1) + TRF_1(sys)$$
$$+ SPH(sys, year) + JNR(sys, year) + SNR(sys, year)$$

(E2)

where we calculate the number of FTF, *FTF(sys,year),* as the sum over all the ethnic, gender, and age cohorts in Eq. A1 using the participation rate specified for the particular scenario of interest (see Chapter 2's Table 1). The other terms in Eq. E2 are calculated as discussed in Appendix A.

The constrained enrollments are given by

$$Constrained\_Enrollment(sys, year, fee) =$$
$$FTF(sys, year, fee) + cHLD_1(sys) * FRS(sys, year - 1) + TRF_1(sys)$$
$$+ SPH(sys, year) + JNR(sys, year) + SNR(sys, year)$$

(E3)

where the number of FTF, *FTF(sys,year,fee),* calculated using the participation rate, state funding, and efficiency improvement estimates specified for the particular scenario, is given by the smaller of (1) the sum over all the ethnic, gender, and age cohorts in Eq. B2 or (2) the largest value of *FTF(sys,year,fee)* that satisfies Eq. D1. Note that the *FRS(sys,year), SPH(sys,year), JNR(sys,year),* and *SNR(sys,year)* terms depend on the *FTF(sys,year,fee)* term in earlier years, so that in general all the terms in Eqs. E2 and E3 will differ each year for any given scenario.