

Table 1: Summary of models for system-wide traffic demand variables.

Modeled variable	Model	Probability Density Function (PDF)	Parameters
Session arrival	Time-varying Poisson with rate $\lambda(t)$	N : # of sessions between t_1 and t_2 $\lambda = \int_{t_1}^{t_2} \lambda(t) dt$, $Pr(N = n) = \frac{e^{-\lambda} \lambda^n}{n!}$, $n = 0, 1, \dots$	Hourly rate: 44 (min), 1132 (max), 294 (median)
AP of first association/ session	Lognormal	$p(x) = \frac{1}{\sqrt{2\pi} x \sigma} \exp -\frac{(\ln x - \mu)^2}{2\sigma^2}$	$\mu = 4.0855$, $\sigma = 1.4408$
Flow interarrival/ session	Lognormal	Same as above	$\mu = -1.3674$, $\sigma = 2.785$
Flow number/ session	BiPareto	$p(x) = k^\beta (1 + c)^{\beta - \alpha} x^{-(\alpha + 1)} (x + kc)^{\alpha - \beta - 1}$ $(\beta x + \alpha kc)$, $x \geq k$	$\alpha = 0.06$, $\beta = 1.72$, $c = 284.79$, $k = 1$
Flow size	BiPareto	Same as above	$\alpha = 0.00$, $\beta = 0.91$, $c = 5.20$, $k = 179$