

$$tp \sim \text{Gamma-Poisson}(\lambda, \phi) \mid \log(\lambda) = \alpha + \beta_{[t_num]} + \beta_{[c_num]}$$

$$\alpha \sim \text{Normal}(0, 1) \mid \beta_{[t_num]} \sim \text{Normal}(0, 1) \mid \beta_{[c_num]} \sim \text{Normal}(0, 1) \mid \phi \sim \text{Exponential}(1)$$

$$tp \sim \text{Gamma-Poisson}(\lambda, \phi) \mid \log(\lambda) = \alpha_{[t_num]} + \beta_{[c_num]}$$

$$\alpha_{[t_num]} \sim \text{Normal}(0, 1) \mid \beta_{[c_num]} \sim \text{Normal}(1, 0.5) \mid \phi \sim \text{Exponential}(1)$$