Objective: \$944, 207, 057, 899; without intervention: \$1, 003, 523, 874, 292 (Desired optimality gap: 40%; actual: 67%. Time to solve: 298s) $C^{I} = \$10,000,C^{D} = \$10,000,000$ One Period=7 days (costs scaled by 1,000,000 during optimization) Infected - No intervention Cumulative Deaths - No intervention \$1,000,000 300000 - Cumulative Deaths Recovered - No intervention — Recovered Susceptible - No intervention — Susceptible \$944,207.106 — Cumulative Costs of Interventions Cumulative Cost Total Cumulative Cost Total - No intervention 250000 -- \$800,000 200000 \$600,000 <u>≤</u> 150000 - \$400,000 100000 -- \$200,000 50000 -- \$0 20 60 40 80 Period 30 31 -30 -31 1. Education (University level)
A: \$[0 ,0]·10²
C: \$[10 ,14]·10²
P: [.99 ,.93] 2. Social Gatherings (in a house)
A: \$[0 ,0 ,0 ,0]\cdot 10^2
C: \$[8 ,10 ,12 ,14]\cdot 10^2
P: [.99 ,.97 ,.95 ,.9] 3. Non-Food Service (bank,retail, etc)
A: \$[250 ,500 ,1000]:10²
C: \$[8 ,10 ,14]:10²
P: [.99 ,.93 ,.9] 5. Masking A: \$[0 ,0 ,0]·10² C: \$[8 ,10 ,14]·10² P: [.99 ,.93 ,.9]