Objective: \$947, 431, 261, 487; without intervention: \$1, 003, 571, 304, 682 (Desired optimality gap: 85%; actual: 61%. Time to solve: 270s)
$C^I = \$10,000, C^D = \$10,000,000$
One Period=7 days (costs scaled by 1, 000, 000 during optimization)

Infected - No intervention
Infected
Cumulative Deaths - No intervention
Cumulative Deaths
Recovered - No intervention
Recovered
Susceptible - No intervention
Susceptible
Cumulative Costs of Interventions
Cumulative Cost Total
Cumulative Cost Total - No intervention
Number individuals
300000
250000
200000
150000
100000
50000
0
$1, 003, 571 · 10^6
$947, 431 · 10^6
$74, 380 · 10^6
$1,000,000
$800,000
$600,000
$400,000
$200,000
$0
Cumulative Cost (in $10^6)

	0 -5	6 -6	7 -21	22 -24	25 -25	26 -26	27 -27	28 -30	31 -79
0. Movement A: \$[5000 ,10000]$\cdot 10^2$ C: \$[10 ,14]$\cdot 10^2$ P: [.95 ,.93]		2	2	2	2				
1. Education (University level) A: \$[0 ,0]$\cdot 10^2$ C: \$[10 ,14]$\cdot 10^2$ P: [.99 ,.95]			2						
2. Social Gatherings (in a house) A: \$[0 ,0 ,0 ,0]$\cdot 10^2$ C: \$[8 ,10 ,12 ,14]$\cdot 10^2$ P: [.99 ,.99 ,.97 ,.93]		4	4	4	4	4	4		
3. Non-Food Service (bank,retail, etc) A: \$[2500 ,5000 ,10000]$\cdot 10^2$ C: \$[8 ,10 ,14]$\cdot 10^2$ P: [.99 ,.95 ,.93]		3	3	3					
4. Restaurants A: \$[5000 ,10000]$\cdot 10^2$ C: \$[10 ,14]$\cdot 10^2$ P: [.95 ,.93]			2	2	2	2			
5. Masking A: \$[0 ,0 ,0]$\cdot 10^2$ C: \$[8 ,10 ,14]$\cdot 10^2$ P: [.99 ,.95 ,.93]		3	3	3	3	3	3		
6. Mega Events A: \$[2500 ,5000 ,10000]$\cdot 10^2$ C: \$[8 ,10 ,14]$\cdot 10^2$ P: [.99 ,.95 ,.93]		3	3	3	3	3			
7. Border Control A: \$[5000 ,10000]$\cdot 10^2$ C: \$[10 ,14]$\cdot 10^2$ P: [.95 ,.93]		2	2	2	2				
8. Physical Distancing A: \$[0]$\cdot 10^2$ C: \$[10]$\cdot 10^2$ P: [.93]		1	1	1	1	1	1	1	