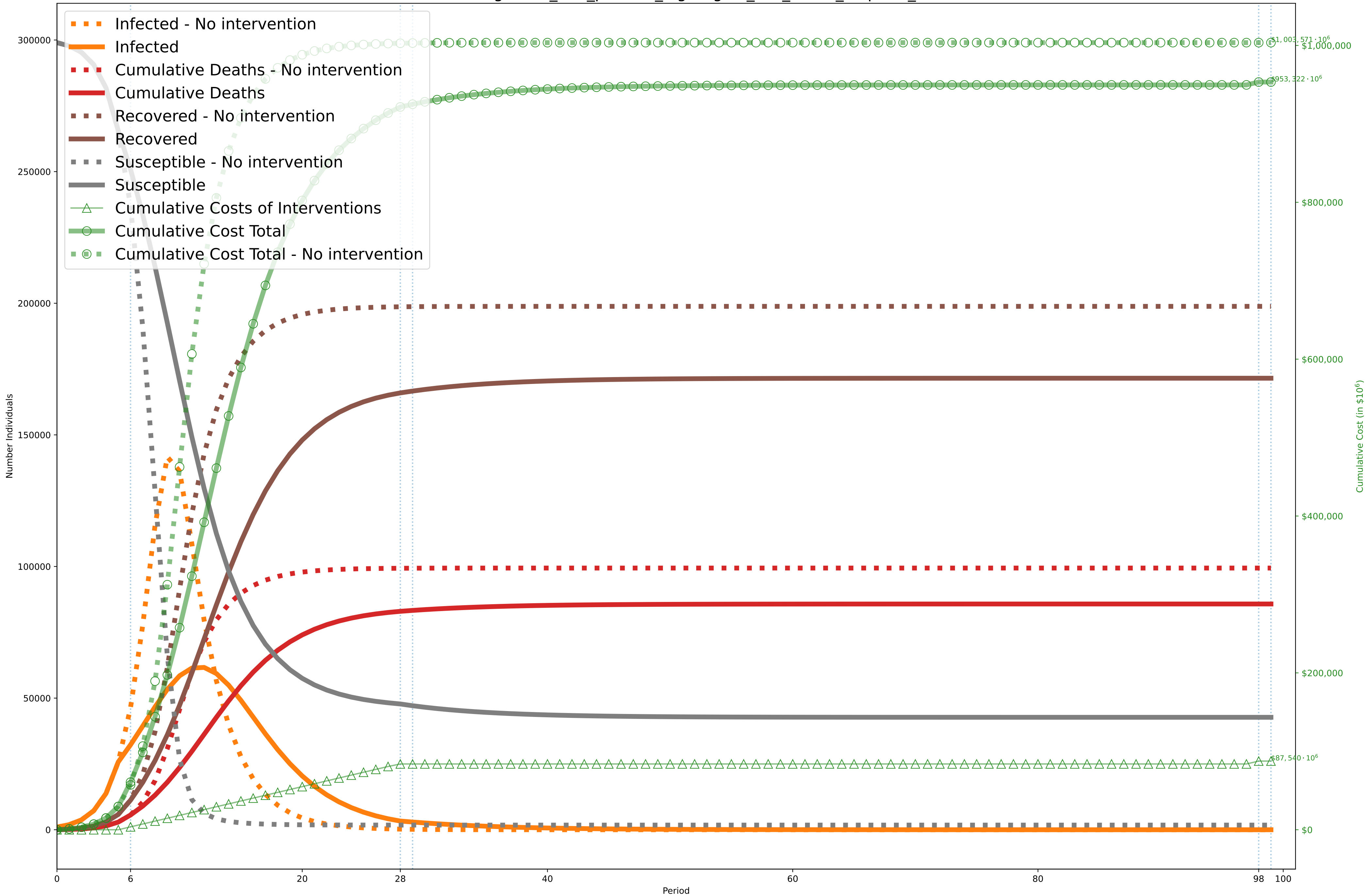


Objective: \$953,322,418,079; without intervention: \$1,003,571,304,682 (Desired optimality gap: 1%; actual: 2%. Lower Bound: \$934,880,000,000. Time to solve: 285s)

$C^I = \$10,000, C^D = \$10,000,000$ . Zero switching costs.

One Period=7 days (costs scaled by 1,000,000 during optimization)

Solved using solve\_and\_process\_lagrangian\_use\_smart\_stepsize\_True



	0 -5	6 -27	28 -28	29 -97	98 -98	99 -99
0. Movement A: $[\$5000, 10000] \cdot 10^2$ B: $[\$0, 0] \cdot 10^2$ C: $[\$10, 14] \cdot 10^2$ P: $[\cdot 95, \cdot 93]$		2	2		2	
1. Education (University level) A: $[\$0, 0] \cdot 10^2$ B: $[\$0, 0] \cdot 10^2$ C: $[\$10, 14] \cdot 10^2$ P: $[\cdot 99, \cdot 95]$		2			2	
2. Social Gatherings (in a house) A: $[\$0, 0, 0, 0] \cdot 10^2$ B: $[\$0, 0, 0, 0] \cdot 10^2$ C: $[\$8, 10, 12, 14] \cdot 10^2$ P: $[\cdot 99, \cdot 99, \cdot 97, \cdot 93]$		4	4		4	
3. Non-Food Service (bank, retail, etc) A: $[\$2500, 5000, 10000] \cdot 10^2$ B: $[\$0, 0, 0] \cdot 10^2$ C: $[\$8, 10, 14] \cdot 10^2$ P: $[\cdot 99, \cdot 95, \cdot 93]$		3	3		3	
4. Restaurants A: $[\$5000, 10000] \cdot 10^2$ B: $[\$0, 0] \cdot 10^2$ C: $[\$10, 14] \cdot 10^2$ P: $[\cdot 95, \cdot 93]$		2	2		2	
5. Masking A: $[\$0, 0, 0] \cdot 10^2$ B: $[\$0, 0, 0] \cdot 10^2$ C: $[\$8, 10, 14] \cdot 10^2$ P: $[\cdot 99, \cdot 95, \cdot 93]$		3	3		3	
6. Mega Events A: $[\$2500, 5000, 10000] \cdot 10^2$ B: $[\$0, 0, 0] \cdot 10^2$ C: $[\$8, 10, 14] \cdot 10^2$ P: $[\cdot 99, \cdot 95, \cdot 93]$		3	3		3	
7. Border Control A: $[\$5000, 10000] \cdot 10^2$ B: $[\$0, 0] \cdot 10^2$ C: $[\$10, 14] \cdot 10^2$ P: $[\cdot 95, \cdot 93]$		2	2		2	
8. Physical Distancing A: $[\$0] \cdot 10^2$ B: $[\$0] \cdot 10^2$ C: $[\$10] \cdot 10^2$ P: $[\cdot 93]$		1	1		1	
Cost Per Period: TOTAL Cost Per Period: POLICY Cost Per Period: DISEASE Probability Factor	$\$4.9\text{e}+09$ $\$0.0$ $\$4.9\text{e}+09$ 1.000	$\$4\text{e}+10$ $\$3.7\text{e}+09$ $\$3.7\text{e}+10$ 0.509	$\$7.7\text{e}+$ $\$3.2\text{e}+$ $\$4.4\text{e}+$ 6.536	$\$4.1\text{e}+08$ $\$0.0$ $\$4.1\text{e}+08$ 1.000	$\$3.7\text{e}+$ $\$3.2\text{e}+$ $\$1.8\text{e}+$ 0.509	$\$1.4\text{e}+05$ $\$0.0$ $\$1.4\text{e}+05$ 1.000