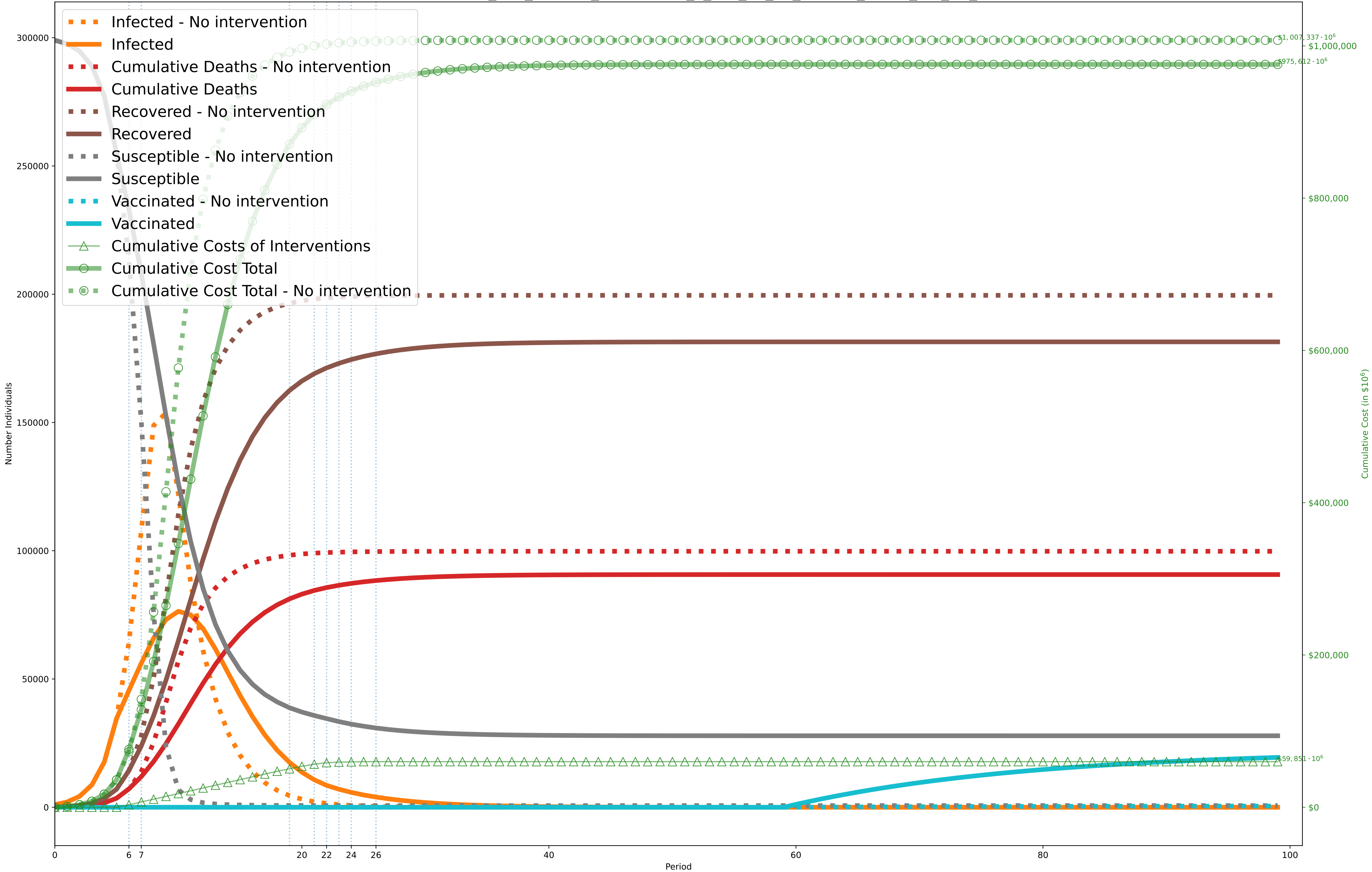


Objective: \$975, 612, 471, 653; without intervention: \$1, 007, 337, 001, 719 (Desired optimality gap: 80%; actual: 77%. Lower Bound: \$222,473,000,000. Time to solve: 52s)  
 $C^I = \$10, 000, C^D = \$10, 000, 000$

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

Solved using solve\_and\_process\_vaccination\_T\_vax\_60\_S0\_antivax\_factor\_0.2\_KV\_0.05



	0 -5	6 -6	7 -18	19 -20	21 -21	22 -22	23 -23	24 -25	26 -99
0. Movement A: $[\$5000, 10000] \cdot 10^2$ B: $[\$10000, 20000] \cdot 10^2$ C: $[\$10, 14] \cdot 10^2$ P: $[\cdot 95, \cdot 93]$		2	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. 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	4	4			
3. Non-Food Service (bank, retail, etc) A: $[\$2500, 5000, 10000] \cdot 10^2$ B: $[\$5000, 10000, 20000] \cdot 10^2$ C: $[\$8, 10, 14] \cdot 10^2$ P: $[\cdot 99, \cdot 95, \cdot 93]$		3	3	3	3				
4. Restaurants A: $[\$5000, 10000] \cdot 10^2$ B: $[\$10000, 20000] \cdot 10^2$ C: $[\$10, 14] \cdot 10^2$ P: $[\cdot 95, \cdot 93]$		2	2	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	3	3	3		
6. Mega Events A: $[\$2500, 5000, 10000] \cdot 10^2$ B: $[\$5000, 10000, 20000] \cdot 10^2$ 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: $[\$10000, 20000] \cdot 10^2$ C: $[\$10, 14] \cdot 10^2$ P: $[\cdot 95, \cdot 93]$		2	2	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	1	1	1	1	
Cost Per Period: TOTAL Cost Per Period: POLICY Cost Per Period: DISEASE Probability Factor	$\$6e+09$ $\$9.0$ $\$6e+09$ 1.000	$\$4e+10$ $\$3.3e+$ $\$3.7e+$ 0.536	$\$6.4e+10$ $\$3.7e+09$ $\$6e+10$ 0.509	$\$2.4e+$ $\$3.2e+$ $\$2.1e+$ 0.536	$\$1.7e+$ $\$2.2e+$ $\$1.4e+$ 0.579	$\$1.3e+$ $\$2e+09$ $\$1.1e+$ 0.677	$\$9.8e+$ $\$7.2e+$ $\$9e+09$ 0.856	$\$7.1e+$ $\$3e+08$ $\$6.8e+$ 0.925	$\$3.9e+08$ $\$0.0$ $\$3.9e+08$ 1.000