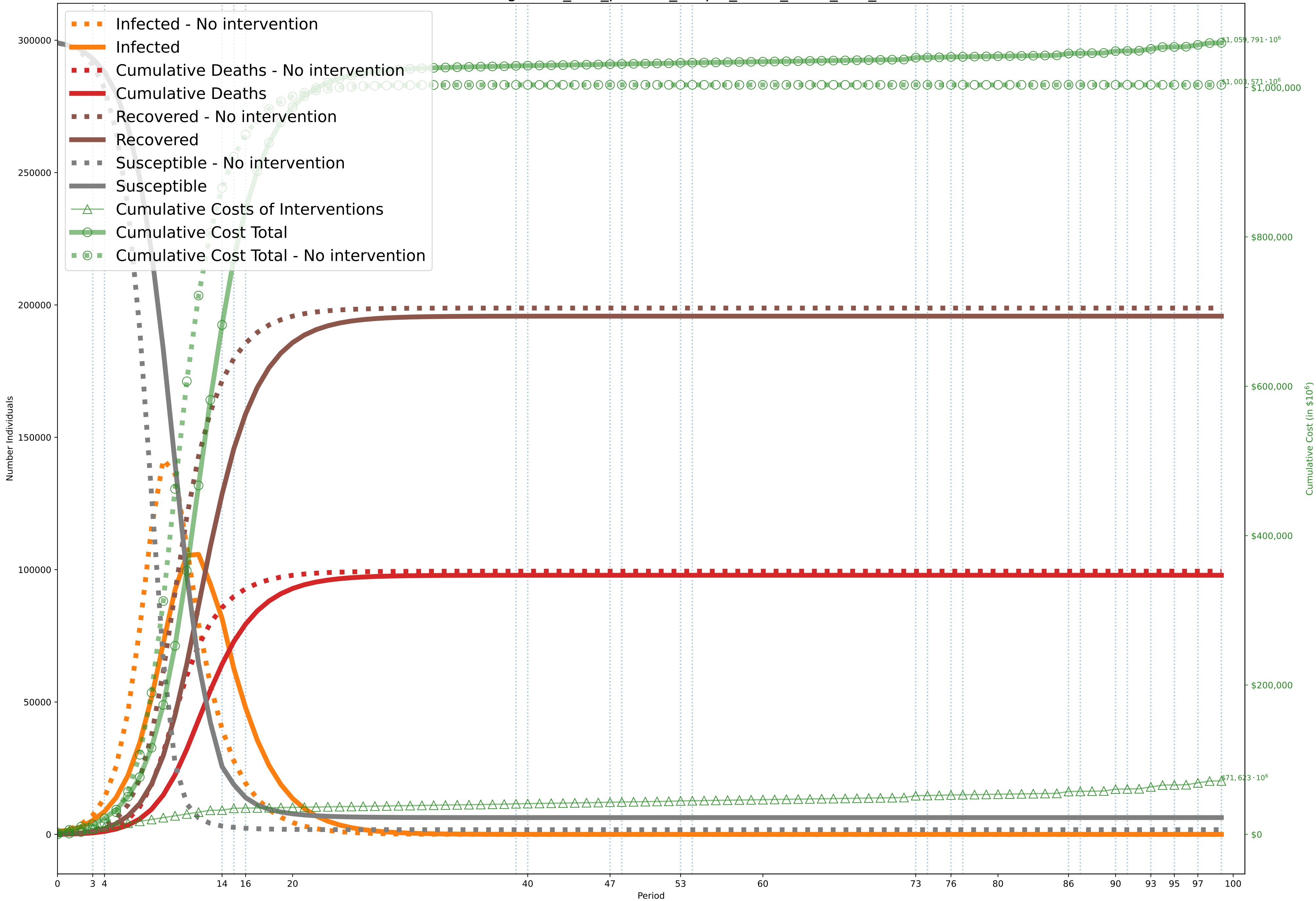


Objective: \$1,059,551,745,254; without intervention: \$1,003,571,304,682 (Desired optimality gap: 1%; actual: 0%. Lower Bound: \$1,058,493,000,000. Time to solve: 750s)

$C^I = \$10,000$ ,  $C^D = \$10,000,000$ . Zero switching costs.  
One Period=7 days (costs scaled by 1,000,000 during optimization)  
Solved using solve\_and\_process\_simple\_index\_block\_size\_1



	0 -2	3 -3	4 -13	14 -14	15 -15	16 -38	39 -39	40 -46	47 -47	48 -52	53 -53	54 -72	73 -73	74 -75	76 -76	77 -85	86 -86	87 -89	90 -90	91 -92	93 -94	95 -96	97 -98	99 -99
0. Movement A: \$[5000 ,10000]·10 <sup>2</sup> B: \$[0 ,0 ]·10 <sup>2</sup> C: \$[10 ,14 ]·10 <sup>2</sup> P: [.95 ,.93 ]	1		1		1								1				1		1	1	1	1		
1. Education (University level) A: \$[0 ,0 ]·10 <sup>2</sup> B: \$[0 ,0 ]·10 <sup>2</sup> C: \$[10 ,14 ]·10 <sup>2</sup> P: [.99 ,.95 ]	1		1		1								1				1		1	1	1	1		
2. Social Gatherings (in a house) A: \$[0 ,0 ,0 ,0 ]·10 <sup>2</sup> B: \$[0 ,0 ,0 ,0 ]·10 <sup>2</sup> C: \$[8 ,10 ,12 ,14 ]·10 <sup>2</sup> P: [.99 ,.99 ,.97 ,.93 ]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3. Non-Food Service (bank,retail, etc) A: \$[2500 ,5000 ,10000]·10 <sup>2</sup> B: \$[0 ,0 ,0 ]·10 <sup>2</sup> C: \$[8 ,10 ,14 ]·10 <sup>2</sup> P: [.99 ,.95 ,.93 ]	1		1		1		1		1		1		1		1		1		1	1	1	1		
4. Restaurants A: \$[5000 ,10000]·10 <sup>2</sup> B: \$[0 ,0 ]·10 <sup>2</sup> C: \$[10 ,14 ]·10 <sup>2</sup> P: [.95 ,.93 ]	1		1		1								1				1		1	1	1	1		
5. Masking A: \$[0 ,0 ,0 ]·10 <sup>2</sup> B: \$[0 ,0 ,0 ]·10 <sup>2</sup> C: \$[8 ,10 ,14 ]·10 <sup>2</sup> P: [.99 ,.95 ,.93 ]	1		1		1								1				1		1	1	1	1		
6. Mega Events A: \$[2500 ,5000 ,10000]·10 <sup>2</sup> B: \$[0 ,0 ,0 ]·10 <sup>2</sup> C: \$[8 ,10 ,14 ]·10 <sup>2</sup> P: [.99 ,.95 ,.93 ]	1		1		1								1				1		1	1	1	1		
7. Border Control A: \$[5000 ,10000]·10 <sup>2</sup> B: \$[0 ,0 ]·10 <sup>2</sup> C: \$[10 ,14 ]·10 <sup>2</sup> P: [.95 ,.93 ]	1		1		1								1				1		1	1	1	1		
8. Physical Distancing A: \$[0 ]·10 <sup>2</sup> B: \$[0 ]·10 <sup>2</sup> C: \$[10 ]·10 <sup>2</sup> P: [.93 ]	1		1		1								1				1		1	1	1	1		
Cost Per Period: TOTAL Cost Per Period: POLICY Cost Per Period: DISEASE Probability Factor	\$3.4e+09 \$2.5e+09 \$9.5e+08 0.773	\$3.2e+ \$2.4e+ \$2.9e+ 0.995	\$5.7e+10 \$2.5e+09 \$5.4e+10 0.773	\$1e+11 \$2.4e+ \$1e+11 0.995	\$8.9e+ \$2.5e+ \$8.6e+ 0.773	\$1.1e+10 \$2.4e+08 \$1.1e+10 0.995	\$5.1e+ \$4.8e+ \$3.2e+ 0.990	\$2.5e+08 \$2.4e+08 \$1e+07 0.995	\$4.8e+ \$4.8e+ \$2.1e+ 0.990	\$2.4e+08 \$2.4e+08 \$8.5e+05 0.995	\$4.8e+ \$4.8e+ \$2.7e+ 0.990	\$2.4e+08 \$2.4e+08 \$3.6e+04 0.995	\$2.5e+ \$2.5e+ \$1.8 0.773	\$2.4e+ \$2.4e+ \$0.92 0.995	\$4.8e+ \$4.8e+ \$0.32 0.990	\$2.4e+08 \$2.4e+08 \$0 0.995	\$2.5e+ \$2.5e+ \$0 0.773	\$2.4e+08 \$2.4e+08 \$0 0.995	\$2.5e+ \$2.4e+ \$0 0.773	\$2.4e+ \$2.4e+ \$0 0.995	\$2.5e+ \$2.4e+ \$0 0.773	\$2.4e+ \$2.4e+ \$0 0.995	\$2.5e+ \$2.4e+ \$0 0.773	