

Cardano Parameters		Value
Current Epoch		588
Days in Epoch		5
Days in a Year		365
Epochs in a Year		73
Max Ada Supply		45,000,000,000
Current Ada Supply		38,169,230,015
Reserve Ada		6,830,769,985
Current Treasury Ada		1,500,000,000
Monetary Expansion	0.30%	Rho - A % of the Reserve that goes towards paying Reward in each epoch (e.g. 0.003 is 0.3%)
Distribution to Treasury	20%	Tau - A of the % Reward that goes towards Treasury in each epoch (e.g. 20%)
Fees per epoch in Ada	80,000	
Fees growth per year	100%	
NCL limit	275,000,000	

Treasury top-up						
end of period	from Reserves	from Fees	total	% of total from fees	Treasury Spend	Deficit
Year 1	269,054,000	1,760,000	270,814,000	0.65%	275,000,000	-4,186,000
Year 2	226,590,720	3,122,192	229,712,912	1.36%	275,000,000	-45,287,088
Year 3	162,988,289	3,901,808	166,890,097	2.34%	275,000,000	-108,109,903
Year 4	139,341,064	5,264,000	144,605,064	3.64%	275,000,000	-130,394,936
Year 5	111,898,865	6,432,000	118,330,865	5.44%	275,000,000	-156,669,135

Deficit over 5y	-444,647,062
Starting Treasury	1,500,000,000
Treasury in 5y	1,055,352,938
Treasury % change	-30%

Forecast of Cardano Reserves and Fees						
n	Days Fwd	Epoch	Start of Epoch Reserves	(1) Distribution from Reserves	(2) Fees	(3) = (1) + (2) Gross Rewards
1	5	589	6,830,769,985	20,492,310	81,096	20,573,406
2	10	590	6,810,277,675	20,430,833	82,192	20,513,025
3	15	591	6,789,846,842	20,369,541	83,288	20,452,828
4	20	592	6,769,477,301	20,308,432	84,384	20,392,815
5	25	593	6,749,168,870	20,247,507	85,479	20,332,986
6	30	594	6,728,921,363	20,186,764	86,575	20,273,339
7	35	595	6,708,734,599	20,126,204	87,671	20,213,875
8	40	596	6,688,608,395	20,065,825	88,767	20,154,592
9	45	597	6,668,542,570	20,005,628	89,863	20,095,491
10	50	598	6,648,536,942	19,945,611	90,959	20,036,570
11	55	599	6,628,591,331	19,885,774	92,055	19,977,829
12	60	600	6,608,705,557	19,826,117	93,151	19,919,267
13	65	601	6,588,879,441	19,766,638	94,247	19,860,885
14	70	602	6,569,112,802	19,707,338	95,342	19,802,681
15	75	603	6,549,405,464	19,648,216	96,438	19,744,655
16	80	604	6,529,757,248	19,589,272	97,534	19,686,806
17	85	605	6,510,167,976	19,530,504	98,630	19,629,134
18	90	606	6,490,637,472	19,471,912	99,726	19,571,638
19	95	607	6,471,165,559	19,413,497	100,822	19,514,319
20	100	608	6,451,752,063	19,355,256	101,918	19,457,174
21	105	609	6,432,396,807	19,297,190	103,014	19,400,204
22	110	610	6,413,099,616	19,239,299	104,110	19,343,408
23	115	611	6,393,860,317	19,181,581	105,205	19,286,786
24	120	612	6,374,678,736	19,124,036	106,301	19,230,338
25	125	613	6,355,554,700	19,066,664	107,397	19,174,061
26	130	614	6,336,488,036	19,009,464	108,493	19,117,957
27	135	615	6,317,478,572	18,952,436	109,589	19,062,025
28	140	616	6,298,526,136	18,895,578	110,685	19,006,263
29	145	617	6,279,630,558	18,838,892	111,781	18,950,672
30	150	618	6,260,791,666	18,782,375	112,877	18,895,252
31	155	619	6,242,009,291	18,726,028	113,973	18,840,000
32	160	620	6,223,283,263	18,669,850	115,068	18,784,918
33	165	621	6,204,613,414	18,613,840	116,164	18,730,005
34	170	622	6,185,999,573	18,557,999	117,260	18,675,259
35	175	623	6,167,441,575	18,502,325	118,356	18,620,681
36	180	624	6,148,939,250	18,446,818	119,452	18,566,270
37	185	625	6,130,492,432	18,391,477	120,548	18,512,025
38	190	626	6,112,100,955	18,336,303	121,644	18,457,947
39	195	627	6,093,764,652	18,281,294	122,740	18,404,034
40	200	628	6,075,483,358	18,226,450	123,836	18,350,286
41	205	629	6,057,256,908	18,171,771	124,932	18,296,702
42	210	630	6,039,085,137	18,117,255	126,027	18,243,283
43	215	631	6,020,967,882	18,062,904	127,123	18,190,027
44	220	632	6,002,904,978	18,008,715	128,219	18,136,934
45	225	633	5,984,896,263	17,954,689	129,315	18,084,004
46	230	634	5,966,941,574	17,900,825	130,411	18,031,236
47	235	635	5,949,040,750	17,847,122	131,507	17,978,629
48	240	636	5,931,193,627	17,793,581	132,603	17,926,184
49	245	637	5,913,400,047	17,740,200	133,699	17,873,899

Per Epoch		
Reserves that go to Treasury	Fees that go to Treasury	Reserves + Fees to Treasury
4,098,462	16,219	4,114,681
4,086,167	16,438	4,102,605
4,073,908	16,658	4,090,566
4,061,686	16,877	4,078,563
4,049,501	17,096	4,066,597
4,037,353	17,315	4,054,668
4,025,241	17,534	4,042,775
4,013,165	17,753	4,030,918
4,001,126	17,973	4,019,098
3,989,122	18,192	4,007,314
3,977,155	18,411	3,995,566
3,965,223	18,630	3,983,853
3,953,328	18,849	3,972,177
3,941,468	19,068	3,960,536
3,929,643	19,288	3,948,931
3,917,854	19,507	3,937,361
3,906,101	19,726	3,925,827
3,894,382	19,945	3,914,328
3,882,699	20,164	3,902,864
3,871,051	20,384	3,891,435
3,859,438	20,603	3,880,041
3,847,860	20,822	3,868,682
3,836,316	21,041	3,857,357
3,824,807	21,260	3,846,068
3,813,333	21,479	3,834,812
3,801,893	21,699	3,823,591
3,790,487	21,918	3,812,405
3,779,116	22,137	3,801,253
3,767,778	22,356	3,790,134
3,756,475	22,575	3,779,050
3,745,206	22,795	3,768,000
3,733,970	23,014	3,756,984
3,722,768	23,233	3,746,001
3,711,600	23,452	3,735,052
3,700,465	23,671	3,724,136
3,689,364	23,890	3,713,254
3,678,295	24,110	3,702,405
3,667,261	24,329	3,691,589
3,656,259	24,548	3,680,807
3,645,290	24,767	3,670,057
3,634,354	24,986	3,659,340
3,623,451	25,205	3,648,657
3,612,581	25,425	3,638,005
3,601,743	25,644	3,627,387
3,590,938	25,863	3,616,801
3,580,165	26,082	3,606,247
3,569,424	26,301	3,595,726
3,558,716	26,521	3,585,237
3,548,040	26,740	3,574,780

Cumulative		
Reserves that go to Treasury	Fees that go to Treasury	Reserves and Fees to Treasury
4,098,462	16,219	4,114,681
8,184,629	32,658	8,217,286
12,268,537	49,315	12,307,852
16,320,223	66,192	16,386,415
20,369,724	83,288	20,453,012
24,407,077	100,603	24,507,680
28,432,318	118,137	28,550,455
32,445,483	135,890	32,581,373
36,446,609	153,863	36,600,472
40,435,731	172,055	40,607,786
44,412,886	190,466	44,603,351
48,378,109	209,096	48,587,205
52,331,437	227,945	52,559,382
56,272,904	247,014	56,519,918
60,202,547	266,301	60,468,849
64,120,402	285,808	64,406,210
68,026,503	305,534	68,332,037
71,920,885	325,479	72,246,365
75,803,584	345,644	76,149,228
79,674,636	366,027	80,040,663
83,534,074	386,630	83,920,704
87,381,934	407,452	87,789,386
91,218,250	428,493	91,646,743
95,043,057	449,753	95,492,810
98,856,390	471,233	99,327,623
102,658,283	492,932	103,151,214
106,448,770	514,849	106,963,619
110,227,885	536,986	110,764,872
113,995,664	559,342	114,555,006
117,752,139	581,918	118,334,057
121,497,344	604,712	122,102,057
125,231,314	627,726	125,859,040
128,954,082	650,959	129,605,041
132,665,682	674,411	133,340,093
136,366,147	698,082	137,064,229
140,056,511	721,973	140,777,483
143,733,806	746,082	144,479,888
147,401,067	770,411	148,171,478
151,057,325	794,959	151,852,284
154,702,615	819,726	155,522,341
158,336,970	844,712	159,181,682
161,960,421	869,918	162,830,338
165,573,001	895,342	166,468,344
169,174,744	920,986	170,095,731
172,765,682	946,849	173,712,531
176,345,847	972,932	177,318,779
179,915,272	999,233	180,914,504
183,473,988	1,025,753	184,499,741
187,022,028	1,052,493	188,074,521

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Current Treasury Ada		1,500,000,000
Monetary Expansion		0.30%
Distribution to Treasury		20%
Fees per epoch in Ada		80,000
Fees growth per year		100%
NCL limit		275,000,000
Rho - A % of the Reserve that goes towards paying Reward in each epoch (e.g. 0.003 is 0.3%)		
Tau - A of the % Reward that goes towards Treasury in each epoch (e.g. 20%)		

end of period	Treasury top-up			% of total from fees	Treasury Spend	Deficit
	from Reserves	from Fees	total			
Year 1	269,054,000	1,760,000	270,814,000	0.65%	275,000,000	-4,186,000
Year 2	226,590,720	3,122,192	229,712,912	1.36%	275,000,000	-45,287,088
Year 3	162,988,289	3,901,808	166,890,097	2.34%	275,000,000	-108,109,903
Year 4	139,341,064	5,264,000	144,605,064	3.64%	275,000,000	-130,394,936
Year 5	111,898,865	6,432,000	118,330,865	5.44%	275,000,000	-156,669,135

Deficit over 5y	-444,647,062
Starting Treasury	1,500,000,000
Treasury in 5y	1,055,352,938
Treasury % change	-30%

Forecast of Cardano Reserves and Fees						
n	Days Fwd	Epoch	Start of Epoch Reserves	(1) Distribution from Reserves	(2) Fees	(3) = (1) + (2) Gross Rewards
50	250	638	5,895,659,846	17,686,980	134,795	17,821,774
51	255	639	5,877,972,867	17,633,919	135,890	17,769,809
52	260	640	5,860,338,948	17,581,017	136,986	17,718,003
53	265	641	5,842,757,931	17,528,274	138,082	17,666,356
54	270	642	5,825,229,658	17,475,689	139,178	17,614,867
55	275	643	5,807,753,969	17,423,262	140,274	17,563,536
56	280	644	5,790,330,707	17,370,992	141,370	17,512,362
57	285	645	5,772,959,715	17,318,879	142,466	17,461,345
58	290	646	5,755,640,835	17,266,923	143,562	17,410,484
59	295	647	5,738,373,913	17,215,122	144,658	17,359,779
60	300	648	5,721,158,791	17,163,476	145,753	17,309,230
61	305	649	5,703,995,315	17,111,986	146,849	17,258,835
62	310	650	5,686,883,329	17,060,650	147,945	17,208,595
63	315	651	5,669,822,679	17,009,468	149,041	17,158,509
64	320	652	5,652,813,211	16,958,440	150,137	17,108,577
65	325	653	5,635,854,771	16,907,564	151,233	17,058,797
66	330	654	5,618,947,207	16,856,842	152,329	17,009,170
67	335	655	5,602,090,365	16,806,271	153,425	16,959,696
68	340	656	5,585,284,094	16,755,852	154,521	16,910,373
69	345	657	5,568,528,242	16,705,585	155,616	16,861,201
70	350	658	5,551,822,657	16,655,468	156,712	16,812,180
71	355	659	5,535,167,189	16,605,502	157,808	16,763,310
72	360	660	5,518,561,688	16,555,685	158,904	16,714,589
73	365	661	5,502,006,003	16,506,018	160,000	16,666,018
74	370	662	5,485,499,985	16,456,500	161,096	16,617,596
75	375	663	5,469,043,485	16,407,130	162,192	16,569,322
76	380	664	5,452,636,354	16,357,909	163,288	16,521,197
77	385	665	5,436,278,445	16,308,835	164,384	16,473,219
78	390	666	5,419,969,610	16,259,909	165,479	16,425,388
79	395	667	5,403,709,701	16,211,129	166,575	16,377,704
80	400	668	5,387,498,572	16,162,496	167,671	16,330,167
81	405	669	5,371,336,076	16,114,008	168,767	16,282,775
82	410	670	5,355,222,068	16,065,666	169,863	16,235,529
83	415	671	5,339,156,402	16,017,469	170,959	16,188,428
84	420	672	5,323,138,933	15,969,417	172,055	16,141,472
85	425	673	5,307,169,516	15,921,509	173,151	16,094,659
86	430	674	5,291,248,007	15,873,744	174,247	16,047,991
87	435	675	5,275,374,263	15,826,123	175,342	16,001,465
88	440	676	5,259,548,140	15,778,644	176,438	15,955,083
89	445	677	5,243,769,496	15,731,308	177,534	15,908,843
90	450	678	5,228,038,187	15,684,115	178,630	15,862,745
91	455	679	5,212,354,073	15,637,062	179,726	15,816,788
92	460	680	5,196,717,011	15,590,151	180,822	15,770,973
93	465	681	5,181,126,860	15,543,381	181,918	15,725,298
94	470	682	5,165,583,479	15,496,750	183,014	15,679,764
95	475	683	5,150,086,729	15,450,260	184,110	15,634,370
96	480	684	5,134,636,468	15,403,909	185,205	15,589,115
97	485	685	5,119,232,559	15,357,698	186,301	15,543,999
98	490	686	5,103,874,861	15,311,625	187,397	15,499,022

Per Epoch		
Reserves that go to Treasury	Fees that go to Treasury	Reserves + Fees to Treasury
3,537,396	26,959	3,564,355
3,526,784	27,178	3,553,962
3,516,203	27,397	3,543,601
3,505,655	27,616	3,533,271
3,495,138	27,836	3,522,973
3,484,652	28,055	3,512,707
3,474,198	28,274	3,502,472
3,463,776	28,493	3,492,269
3,453,385	28,712	3,482,097
3,443,024	28,932	3,471,956
3,432,695	29,151	3,461,846
3,422,397	29,370	3,451,767
3,412,130	29,589	3,441,719
3,401,894	29,808	3,431,702
3,391,688	30,027	3,421,715
3,381,513	30,247	3,411,759
3,371,368	30,466	3,401,834
3,361,254	30,685	3,391,939
3,351,170	30,904	3,382,075
3,341,117	31,123	3,372,240
3,331,094	31,342	3,362,436
3,321,100	31,562	3,352,662
3,311,137	31,781	3,342,918
3,301,204	32,000	3,333,204
3,291,300	32,219	3,323,519
3,281,426	32,438	3,313,864
3,271,582	32,658	3,304,239
3,261,767	32,877	3,294,644
3,251,982	33,096	3,285,078
3,242,226	33,315	3,275,541
3,232,499	33,534	3,266,033
3,222,802	33,753	3,256,555
3,213,133	33,973	3,247,106
3,203,494	34,192	3,237,686
3,193,883	34,411	3,228,294
3,184,302	34,630	3,218,932
3,174,749	34,849	3,209,598
3,165,225	35,068	3,200,293
3,155,729	35,288	3,191,017
3,146,262	35,507	3,181,769
3,136,823	35,726	3,172,549
3,127,412	35,945	3,163,358
3,118,030	36,164	3,154,195
3,108,676	36,384	3,145,060
3,099,350	36,603	3,135,953
3,090,052	36,822	3,126,874
3,080,782	37,041	3,117,823
3,071,540	37,260	3,108,800
3,062,325	37,479	3,099,804

Cumulative		
Reserves that go to Treasury	Fees that go to Treasury	Reserves and Fees to Treasury
190,559,424	1,079,452	191,638,876
194,086,207	1,106,630	195,192,837
197,602,411	1,134,027	198,736,438
201,108,065	1,161,644	202,269,709
204,603,203	1,189,479	205,792,683
208,087,856	1,217,534	209,305,390
211,562,054	1,245,808	212,807,862
215,025,830	1,274,301	216,300,131
218,479,214	1,303,014	219,782,228
221,922,239	1,331,945	223,254,184
225,354,934	1,361,096	226,716,030
228,777,331	1,390,466	230,167,797
232,189,461	1,420,055	233,609,516
235,591,355	1,449,863	237,041,218
238,983,043	1,479,890	240,462,933
242,364,556	1,510,137	243,874,693
245,735,924	1,540,603	247,276,527
249,097,178	1,571,288	250,668,466
252,448,349	1,602,192	254,050,540
255,789,466	1,633,315	257,422,781
259,120,559	1,664,658	260,785,217
262,441,659	1,696,219	264,137,879
265,752,796	1,728,000	267,480,796
269,054,000	1,760,000	270,814,000
272,345,300	1,792,219	274,137,519
275,626,726	1,824,658	277,451,384
278,898,308	1,857,315	280,755,623
282,160,075	1,890,192	284,050,267
285,412,057	1,923,288	287,335,344
288,654,283	1,956,603	290,610,885
291,886,782	1,990,137	293,876,919
295,109,583	2,023,890	297,133,474
298,322,717	2,057,863	300,380,580
301,526,210	2,092,055	303,618,265
304,720,094	2,126,466	306,846,560
307,904,396	2,161,096	310,065,491
311,079,144	2,195,945	313,275,090
314,244,369	2,231,014	316,475,383
317,400,098	2,266,301	319,666,399
320,546,360	2,301,808	322,848,168
323,683,182	2,337,534	326,020,717
326,810,595	2,373,479	329,184,074
329,928,625	2,409,644	332,338,269
333,037,301	2,446,027	335,483,329
336,136,651	2,482,630	338,619,281
339,226,703	2,519,452	341,746,155
342,307,485	2,556,493	344,863,978
345,379,025	2,593,753	347,972,778
348,441,350	2,631,233	351,072,583

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Rho - A % of the Reserve that goes towards paying Reward in each epoch (e.g. 0.003 is 0.3%)		
Tau - A of the % Reward that goes towards Treasury in each epoch (e.g. 20%)		

end of period	Treasury top-up			% of total from fees	Treasury Spend	Deficit
	from Reserves	from Fees	total			
Year 1	269,054,000	1,760,000	270,814,000	0.65%	275,000,000	-4,186,000
Year 2	226,590,720	3,122,192	229,712,912	1.36%	275,000,000	-45,287,088
Year 3	162,988,289	3,901,808	166,890,097	2.34%	275,000,000	-108,109,903
Year 4	139,341,064	5,264,000	144,605,064	3.64%	275,000,000	-130,394,936
Year 5	111,898,865	6,432,000	118,330,865	5.44%	275,000,000	-156,669,135

Deficit over 5y	-444,647,062
Starting Treasury	1,500,000,000
Treasury in 5y	1,055,352,938
Treasury % change	-30%

Forecast of Cardano Reserves and Fees						
n	Days Fwd	Epoch	Start of Epoch Reserves	(1) Distribution from Reserves	(2) Fees	(3) = (1) + (2) Gross Rewards
99	495	687	5,088,563,237	15,265,690	188,493	15,454,183
100	500	688	5,073,297,547	15,219,893	189,589	15,409,482
101	505	689	5,058,077,654	15,174,233	190,685	15,364,918
102	510	690	5,042,903,421	15,128,710	191,781	15,320,491
103	515	691	5,027,774,711	15,083,324	192,877	15,276,201
104	520	692	5,012,691,387	15,038,074	193,973	15,232,047
105	525	693	4,997,653,313	14,992,960	195,068	15,188,028
106	530	694	4,982,660,353	14,947,981	196,164	15,144,145
107	535	695	4,967,712,372	14,903,137	197,260	15,100,397
108	540	696	4,952,809,235	14,858,428	198,356	15,056,784
109	545	697	4,937,950,807	14,813,852	199,452	15,013,304
110	550	698	4,923,136,955	14,769,411	200,548	14,969,959
111	555	699	4,908,367,544	14,725,103	201,644	14,926,746
112	560	700	4,893,642,441	14,680,927	202,740	14,883,667
113	565	701	4,878,961,514	14,636,885	203,836	14,840,720
114	570	702	4,864,324,629	14,592,974	204,932	14,797,905
115	575	703	4,849,731,655	14,549,195	206,027	14,755,222
116	580	704	4,835,182,460	14,505,547	207,123	14,712,671
117	585	705	4,820,676,913	14,462,031	208,219	14,670,250
118	590	706	4,806,214,882	14,418,645	209,315	14,627,960
119	595	707	4,791,796,238	14,375,389	210,411	14,585,800
120	600	708	4,777,420,849	14,332,263	211,507	14,543,769
121	605	709	4,763,088,586	14,289,266	212,603	14,501,868
122	610	710	4,748,799,321	14,246,398	213,699	14,460,097
123	615	711	4,734,552,923	14,203,659	214,795	14,418,453
124	620	712	4,720,349,264	14,161,048	215,890	14,376,938
125	625	713	4,706,188,216	14,118,565	216,986	14,335,551
126	630	714	4,692,069,651	14,076,209	218,082	14,294,291
127	635	715	4,677,993,443	14,033,980	219,178	14,253,158
128	640	716	4,663,959,462	13,991,878	220,274	14,212,152
129	645	717	4,649,967,584	13,949,903	221,370	14,171,273
130	650	718	4,636,017,681	13,908,053	222,466	14,130,519
131	655	719	4,622,109,628	13,866,329	223,562	14,089,891
132	660	720	4,608,243,299	13,824,730	224,658	14,049,387
133	665	721	4,594,418,569	13,783,256	225,753	14,009,009
134	670	722	4,580,635,314	13,741,906	226,849	13,968,755
135	675	723	4,566,893,408	13,700,680	227,945	13,928,625
136	680	724	4,553,192,727	13,659,578	229,041	13,888,619
137	685	725	4,539,533,149	13,618,599	230,137	13,848,736
138	690	726	4,525,914,550	13,577,744	231,233	13,808,977
139	695	727	4,512,336,806	13,537,010	232,329	13,769,339
140	700	728	4,498,799,796	13,496,399	233,425	13,729,824
141	705	729	4,485,303,396	13,455,910	234,521	13,690,431
142	710	730	4,471,847,486	13,415,542	235,616	13,651,159
143	715	731	4,458,431,944	13,375,296	236,712	13,612,008
144	720	732	4,445,056,648	13,335,170	237,808	13,572,978
145	725	733	4,431,721,478	13,295,164	238,904	13,534,069
146	730	734	4,418,426,313	13,255,279	240,000	13,495,279
147	735	735	4,405,171,034	13,215,513	241,096	13,456,609

Per Epoch		
Reserves that go to Treasury	Fees that go to Treasury	Reserves + Fees to Treasury
3,053,138	37,699	3,090,837
3,043,979	37,918	3,081,896
3,034,847	38,137	3,072,984
3,025,742	38,356	3,064,098
3,016,665	38,575	3,055,240
3,007,615	38,795	3,046,409
2,998,592	39,014	3,037,606
2,989,596	39,233	3,028,829
2,980,627	39,452	3,020,079
2,971,686	39,671	3,011,357
2,962,770	39,890	3,002,661
2,953,882	40,110	2,993,992
2,945,021	40,329	2,985,349
2,936,185	40,548	2,976,733
2,927,377	40,767	2,968,144
2,918,595	40,986	2,959,581
2,909,839	41,205	2,951,044
2,901,109	41,425	2,942,534
2,892,406	41,644	2,934,050
2,883,729	41,863	2,925,592
2,875,078	42,082	2,917,160
2,866,453	42,301	2,908,754
2,857,853	42,521	2,900,374
2,849,280	42,740	2,892,019
2,840,732	42,959	2,883,691
2,832,210	43,178	2,875,388
2,823,713	43,397	2,867,110
2,815,242	43,616	2,858,858
2,806,796	43,836	2,850,632
2,798,376	44,055	2,842,430
2,789,981	44,274	2,834,255
2,781,611	44,493	2,826,104
2,773,266	44,712	2,817,978
2,764,946	44,932	2,809,877
2,756,651	45,151	2,801,802
2,748,381	45,370	2,793,751
2,740,136	45,589	2,785,725
2,731,916	45,808	2,777,724
2,723,720	46,027	2,769,747
2,715,549	46,247	2,761,795
2,707,402	46,466	2,753,868
2,699,280	46,685	2,745,965
2,691,182	46,904	2,738,086
2,683,108	47,123	2,730,232
2,675,059	47,342	2,722,402
2,667,034	47,562	2,714,596
2,659,033	47,781	2,706,814
2,651,056	48,000	2,699,056
2,643,103	48,219	2,691,322

Cumulative		
Reserves that go to Treasury	Fees that go to Treasury	Reserves and Fees to Treasury
351,494,488	2,668,932	354,163,419
354,538,466	2,706,849	357,245,315
357,573,313	2,744,986	360,318,299
360,599,055	2,783,342	363,382,397
363,615,720	2,821,918	366,437,637
366,623,334	2,860,712	369,484,047
369,621,926	2,899,726	372,521,652
372,611,523	2,938,959	375,550,482
375,592,150	2,978,411	378,570,561
378,563,836	3,018,082	381,581,918
381,526,606	3,057,973	384,584,579
384,480,488	3,098,082	387,578,570
387,425,509	3,138,411	390,563,920
390,361,694	3,178,959	393,540,653
393,289,071	3,219,726	396,508,797
396,207,666	3,260,712	399,468,378
399,117,505	3,301,918	402,419,423
402,018,614	3,343,342	405,361,957
404,911,021	3,384,986	408,296,007
407,794,749	3,426,849	411,221,599
410,669,827	3,468,932	414,138,759
413,536,280	3,511,233	417,047,513
416,394,133	3,553,753	419,947,886
419,243,412	3,596,493	422,839,906
422,084,144	3,639,452	425,723,596
424,916,354	3,682,630	428,598,984
427,740,067	3,726,027	431,466,094
430,555,308	3,769,644	434,324,952
433,362,105	3,813,479	437,175,584
436,160,480	3,857,534	440,018,014
438,950,461	3,901,808	442,852,269
441,732,071	3,946,301	445,678,373
444,505,337	3,991,014	448,496,351
447,270,283	4,035,945	451,306,228
450,026,934	4,081,096	454,108,030
452,775,315	4,126,466	456,901,781
455,515,452	4,172,055	459,687,506
458,247,367	4,217,863	462,465,230
460,971,087	4,263,890	465,234,977
463,686,636	4,310,137	467,996,773
466,394,038	4,356,603	470,750,641
469,093,318	4,403,288	473,496,605
471,784,500	4,450,192	476,234,692
474,467,608	4,497,315	478,964,923
477,142,667	4,544,658	481,687,325
479,809,701	4,592,219	484,401,921
482,468,734	4,640,000	487,108,734
485,119,790	4,688,000	489,807,790
487,762,893	4,736,219	492,499,112

Cardano Parameters		Value
Current Epoch		588
Days in Epoch		5
Days in a Year		365
Epochs in a Year		73
Max Ada Supply		45,000,000,000
Current Ada Supply		38,169,230,015
Reserve Ada		6,830,769,985
Current Treasury Ada		1,500,000,000
Monetary Expansion		0.30%
Distribution to Treasury		20%
Fees per epoch in Ada		80,000
Fees growth per year		100%
NCL limit		275,000,000
Rho - A % of the Reserve that goes towards paying Reward in each epoch (e.g. 0.003 is 0.3%)		
Tau - A of the % Reward that goes towards Treasury in each epoch (e.g. 20%)		

Treasury top-up					
end of period	from Reserves	from Fees	total	% of total from fees	
Year 1	269,054,000	1,760,000	270,814,000	0.65%	275,000,000
Year 2	226,590,720	3,122,192	229,712,912	1.36%	275,000,000
Year 3	162,988,289	3,901,808	166,890,097	2.34%	275,000,000
Year 4	139,341,064	5,264,000	144,605,064	3.64%	275,000,000
Year 5	111,898,865	6,432,000	118,330,865	5.44%	275,000,000

Deficit over 5y	-444,647,062
Starting Treasury	1,500,000,000
Treasury in 5y	1,055,352,938
Treasury % change	-30%

Forecast of Cardano Reserves and Fees						
n	Days Fwd	Epoch	Start of Epoch Reserves	(1) Distribution from Reserves	(2) Fees	(3) = (1) + (2) Gross Rewards
148	740	736	4,391,955,521	13,175,867	242,192	13,418,058
149	745	737	4,378,779,655	13,136,339	243,288	13,379,627
150	750	738	4,365,643,316	13,096,930	244,384	13,341,314
151	755	739	4,352,546,386	13,057,639	245,479	13,303,119
152	760	740	4,339,488,747	13,018,466	246,575	13,265,042
153	765	741	4,326,470,281	12,979,411	247,671	13,227,082
154	770	742	4,313,490,870	12,940,473	248,767	13,189,240
155	775	743	4,300,550,397	12,901,651	249,863	13,151,514
156	780	744	4,287,648,746	12,862,946	250,959	13,113,905
157	785	745	4,274,785,800	12,824,357	252,055	13,076,412
158	790	746	4,261,961,442	12,785,884	253,151	13,039,035
159	795	747	4,249,175,558	12,747,527	254,247	13,001,773
160	800	748	4,236,428,031	12,709,284	255,342	12,964,627
161	805	749	4,223,718,747	12,671,156	256,438	12,927,595
162	810	750	4,211,047,591	12,633,143	257,534	12,890,677
163	815	751	4,198,414,448	12,595,243	258,630	12,853,873
164	820	752	4,185,819,205	12,557,458	259,726	12,817,184
165	825	753	4,173,261,747	12,519,785	260,822	12,780,607
166	830	754	4,160,741,962	12,482,226	261,918	12,744,144
167	835	755	4,148,259,736	12,444,779	263,014	12,707,793
168	840	756	4,135,814,957	12,407,445	264,110	12,671,554
169	845	757	4,123,407,512	12,370,223	265,205	12,635,428
170	850	758	4,111,037,289	12,333,112	266,301	12,599,413
171	855	759	4,098,704,178	12,296,113	267,397	12,563,510
172	860	760	4,086,408,065	12,259,224	268,493	12,527,717
173	865	761	4,074,148,841	12,222,447	269,589	12,492,036
174	870	762	4,061,926,394	12,185,779	270,685	12,456,464
175	875	763	4,049,740,615	12,149,222	271,781	12,421,003
176	880	764	4,037,591,393	12,112,774	272,877	12,385,651
177	885	765	4,025,478,619	12,076,436	273,973	12,350,408
178	890	766	4,013,402,183	12,040,207	275,068	12,315,275
179	895	767	4,001,361,977	12,004,086	276,164	12,280,250
180	900	768	3,989,357,891	11,968,074	277,260	12,245,334
181	905	769	3,977,389,817	11,932,169	278,356	12,210,526
182	910	770	3,965,457,648	11,896,373	279,452	12,175,825
183	915	771	3,953,561,275	11,860,684	280,548	12,141,232
184	920	772	3,941,700,591	11,825,102	281,644	12,106,746
185	925	773	3,929,875,489	11,789,626	282,740	12,072,366
186	930	774	3,918,085,863	11,754,258	283,836	12,038,093
187	935	775	3,906,331,605	11,718,995	284,932	12,003,926
188	940	776	3,894,612,610	11,683,838	286,027	11,969,865
189	945	777	3,882,928,772	11,648,786	287,123	11,935,910
190	950	778	3,871,279,986	11,613,840	288,219	11,902,059
191	955	779	3,859,666,146	11,578,998	289,315	11,868,314
192	960	780	3,848,087,148	11,544,261	290,411	11,834,672
193	965	781	3,836,542,886	11,509,629	291,507	11,801,136
194	970	782	3,825,033,258	11,475,100	292,603	11,767,703
195	975	783	3,813,558,158	11,440,674	293,699	11,734,373
196	980	784	3,802,117,483	11,406,352	294,795	11,701,147

Per Epoch		
Reserves that go to Treasury	Fees that go to Treasury	Reserves + Fees to Treasury
2,635,173	48,438	2,683,612
2,627,268	48,658	2,675,925
2,619,386	48,877	2,668,263
2,611,528	49,096	2,660,624
2,603,693	49,315	2,653,008
2,595,882	49,534	2,645,416
2,588,095	49,753	2,637,848
2,580,330	49,973	2,630,303
2,572,589	50,192	2,622,781
2,564,871	50,411	2,615,282
2,557,177	50,630	2,607,807
2,549,505	50,849	2,600,355
2,541,857	51,068	2,592,925
2,534,231	51,288	2,585,519
2,526,629	51,507	2,578,135
2,519,049	51,726	2,570,775
2,511,492	51,945	2,563,437
2,503,957	52,164	2,556,121
2,496,445	52,384	2,548,829
2,488,956	52,603	2,541,559
2,481,489	52,822	2,534,311
2,474,045	53,041	2,527,086
2,466,622	53,260	2,519,883
2,459,223	53,479	2,512,702
2,451,845	53,699	2,505,543
2,444,489	53,918	2,498,407
2,437,156	54,137	2,491,293
2,429,844	54,356	2,484,201
2,422,555	54,575	2,477,130
2,415,287	54,795	2,470,082
2,408,041	55,014	2,463,055
2,400,817	55,233	2,456,050
2,393,615	55,452	2,449,067
2,386,434	55,671	2,442,105
2,379,275	55,890	2,435,165
2,372,137	56,110	2,428,246
2,365,020	56,329	2,421,349
2,357,925	56,548	2,414,473
2,350,852	56,767	2,407,619
2,343,799	56,986	2,400,785
2,336,768	57,205	2,393,973
2,329,757	57,425	2,387,182
2,322,768	57,644	2,380,412
2,315,800	57,863	2,373,663
2,308,852	58,082	2,366,934
2,301,926	58,301	2,360,227
2,295,020	58,521	2,353,541
2,288,135	58,740	2,346,875
2,281,270	58,959	2,340,229

Cumulative		
Reserves that go to Treasury	Fees that go to Treasury	Reserves and Fees to Treasury
490,398,066	4,784,658	495,182,724
493,025,334	4,833,315	497,858,649
495,644,720	4,882,192	500,526,912
498,256,248	4,931,288	503,187,535
500,859,941	4,980,603	505,840,544
503,455,823	5,030,137	508,485,960
506,043,918	5,079,890	511,123,808
508,624,248	5,129,863	513,754,111
511,196,837	5,180,055	516,376,892
513,761,709	5,230,466	518,992,174
516,318,885	5,281,096	521,599,981
518,868,391	5,331,945	524,200,336
521,410,248	5,383,014	526,793,262
523,944,479	5,434,301	529,378,780
526,471,107	5,485,808	531,956,916
528,990,156	5,537,534	534,527,690
531,501,648	5,589,479	537,091,127
534,005,605	5,641,644	539,647,248
536,502,500	5,694,027	542,196,077
538,991,006	5,746,630	544,737,636
541,472,495	5,799,452	547,271,947
543,946,539	5,852,493	549,799,032
546,413,161	5,905,753	552,318,915
548,872,384	5,959,233	554,831,617
551,324,229	6,012,932	557,337,160
553,768,718	6,066,849	559,835,567
556,205,874	6,120,986	562,326,860
558,635,718	6,175,342	564,811,061
561,058,273	6,229,918	567,288,191
563,473,560	6,284,712	569,758,273
565,881,602	6,339,726	572,221,328
568,282,419	6,394,959	574,677,378
570,676,034	6,450,411	577,126,445
573,062,467	6,506,082	579,568,550
575,441,742	6,561,973	582,003,715
577,813,879	6,618,082	584,431,961
580,178,899	6,674,411	586,853,310
582,536,824	6,730,959	589,267,783
584,887,676	6,787,726	591,675,402
587,231,475	6,844,712	594,076,187
589,568,243	6,901,918	596,470,160
591,898,000	6,959,342	598,857,342
594,220,768	7,016,986	601,237,754
596,536,567	7,074,849	603,611,417
598,845,420	7,132,932	605,978,351
601,147,345	7,191,233	608,338,578
603,442,365	7,249,753	610,692,119
605,730,500	7,308,493	613,038,993
608,011,771	7,367,452	615,379,223

Cardano Parameters		Value
Current Epoch		588
Days in Epoch		5
Days in a Year		365
Epochs in a Year		73
Max Ada Supply		45,000,000,000
Current Ada Supply		38,169,230,015
Reserve Ada		6,830,769,985
Current Treasury Ada		1,500,000,000
Monetary Expansion		0.30%
Distribution to Treasury		20%
Fees per epoch in Ada		80,000
Fees growth per year		100%
NCL limit		275,000,000
Rho - A % of the Reserve that goes towards paying Reward in each epoch (e.g. 0.003 is 0.3%)		
Tau - A of the % Reward that goes towards Treasury in each epoch (e.g. 20%)		

end of period	Treasury top-up			% of total from fees	Treasury Spend	Deficit
	from Reserves	from Fees	total			
Year 1	269,054,000	1,760,000	270,814,000	0.65%	275,000,000	-4,186,000
Year 2	226,590,720	3,122,192	229,712,912	1.36%	275,000,000	-45,287,088
Year 3	162,988,289	3,901,808	166,890,097	2.34%	275,000,000	-108,109,903
Year 4	139,341,064	5,264,000	144,605,064	3.64%	275,000,000	-130,394,936
Year 5	111,898,865	6,432,000	118,330,865	5.44%	275,000,000	-156,669,135

Deficit over 5y	-444,647,062
Starting Treasury	1,500,000,000
Treasury in 5y	1,055,352,938
Treasury % change	-30%

Forecast of Cardano Reserves and Fees						
n	Days Fwd	Epoch	Start of Epoch Reserves	(1) Distribution from Reserves	(2) Fees	(3) = (1) + (2) Gross Rewards
197	985	785	3,790,711,131	11,372,133	295,890	11,668,024
198	990	786	3,779,338,998	11,338,017	296,986	11,635,003
199	995	787	3,768,000,981	11,304,003	298,082	11,602,085
200	1000	788	3,756,696,978	11,270,091	299,178	11,569,269
201	1005	789	3,745,426,887	11,236,281	300,274	11,536,555
202	1010	790	3,734,190,606	11,202,572	301,370	11,503,942
203	1015	791	3,722,988,034	11,168,964	302,466	11,471,430
204	1020	792	3,711,819,070	11,135,457	303,562	11,439,019
205	1025	793	3,700,683,613	11,102,051	304,658	11,406,708
206	1030	794	3,689,581,562	11,068,745	305,753	11,374,498
207	1035	795	3,678,512,817	11,035,538	306,849	11,342,388
208	1040	796	3,667,477,279	11,002,432	307,945	11,310,377
209	1045	797	3,656,474,847	10,969,425	309,041	11,278,466
210	1050	798	3,645,505,422	10,936,516	310,137	11,246,653
211	1055	799	3,634,568,906	10,903,707	311,233	11,214,940
212	1060	800	3,623,665,200	10,870,996	312,329	11,183,324
213	1065	801	3,612,794,204	10,838,383	313,425	11,151,807
214	1070	802	3,601,955,821	10,805,867	314,521	11,120,388
215	1075	803	3,591,149,954	10,773,450	315,616	11,089,066
216	1080	804	3,580,376,504	10,741,130	316,712	11,057,842
217	1085	805	3,569,635,374	10,708,906	317,808	11,026,714
218	1090	806	3,558,926,468	10,676,779	318,904	10,995,684
219	1095	807	3,548,249,689	10,644,749	320,000	10,964,749
220	1100	808	3,537,604,940	10,612,815	321,096	10,933,911
221	1105	809	3,526,992,125	10,580,976	322,192	10,903,168
222	1110	810	3,516,411,149	10,549,233	323,288	10,872,521
223	1115	811	3,505,861,915	10,517,586	324,384	10,841,969
224	1120	812	3,495,344,329	10,486,033	325,479	10,811,512
225	1125	813	3,484,858,296	10,454,575	326,575	10,781,150
226	1130	814	3,474,403,722	10,423,211	327,671	10,750,882
227	1135	815	3,463,980,510	10,391,942	328,767	10,720,709
228	1140	816	3,453,588,569	10,360,766	329,863	10,690,629
229	1145	817	3,443,227,803	10,329,683	330,959	10,660,642
230	1150	818	3,432,898,120	10,298,694	332,055	10,630,749
231	1155	819	3,422,599,425	10,267,798	333,151	10,600,949
232	1160	820	3,412,331,627	10,236,995	334,247	10,571,241
233	1165	821	3,402,094,632	10,206,284	335,342	10,541,626
234	1170	822	3,391,888,348	10,175,665	336,438	10,512,103
235	1175	823	3,381,712,683	10,145,138	337,534	10,482,672
236	1180	824	3,371,567,545	10,114,703	338,630	10,453,333
237	1185	825	3,361,452,843	10,084,359	339,726	10,424,085
238	1190	826	3,351,368,484	10,054,105	340,822	10,394,927
239	1195	827	3,341,314,379	10,023,943	341,918	10,365,861
240	1200	828	3,331,290,436	9,993,871	343,014	10,336,885
241	1205	829	3,321,296,564	9,963,890	344,110	10,307,999
242	1210	830	3,311,332,675	9,933,998	345,205	10,279,204
243	1215	831	3,301,398,677	9,904,196	346,301	10,250,497
244	1220	832	3,291,494,480	9,874,483	347,397	10,221,881
245	1225	833	3,281,619,997	9,844,860	348,493	10,193,353

Per Epoch		
Reserves that go to Treasury	Fees that go to Treasury	Reserves + Fees to Treasury
2,274,427	59,178	2,333,605
2,267,603	59,397	2,327,001
2,260,801	59,616	2,320,417
2,254,018	59,836	2,313,854
2,247,256	60,055	2,307,311
2,240,514	60,274	2,300,788
2,233,793	60,493	2,294,286
2,227,091	60,712	2,287,804
2,220,410	60,932	2,281,342
2,213,749	61,151	2,274,900
2,207,108	61,370	2,268,478
2,200,486	61,589	2,262,075
2,193,885	61,808	2,255,693
2,187,303	62,027	2,249,331
2,180,741	62,247	2,242,988
2,174,199	62,466	2,236,665
2,167,677	62,685	2,230,361
2,161,173	62,904	2,224,078
2,154,690	63,123	2,217,813
2,148,226	63,342	2,211,568
2,141,781	63,562	2,205,343
2,135,356	63,781	2,199,137
2,128,950	64,000	2,192,950
2,122,563	64,219	2,186,782
2,116,195	64,438	2,180,634
2,109,847	64,658	2,174,504
2,103,517	64,877	2,168,394
2,097,207	65,096	2,162,302
2,090,915	65,315	2,156,230
2,084,642	65,534	2,150,176
2,078,388	65,753	2,144,142
2,072,153	65,973	2,138,126
2,065,937	66,192	2,132,128
2,059,739	66,411	2,126,150
2,053,560	66,630	2,120,190
2,047,399	66,849	2,114,248
2,041,257	67,068	2,108,325
2,035,133	67,288	2,102,421
2,029,028	67,507	2,096,534
2,022,941	67,726	2,090,667
2,016,872	67,945	2,084,817
2,010,821	68,164	2,078,985
2,004,789	68,384	2,073,172
1,998,774	68,603	2,067,377
1,992,778	68,822	2,061,600
1,986,800	69,041	2,055,841
1,980,839	69,260	2,050,099
1,974,897	69,479	2,044,376
1,968,972	69,699	2,038,671

Cumulative		
Reserves that go to Treasury	Fees that go to Treasury	Reserves and Fees to Treasury
610,286,197	7,426,630	617,712,828
612,553,801	7,486,027	620,039,828
614,814,601	7,545,644	622,360,245
617,068,620	7,605,479	624,674,099
619,315,876	7,665,534	626,981,410
621,556,390	7,725,808	629,282,198
623,790,183	7,786,301	631,576,484
626,017,274	7,847,014	633,864,288
628,237,685	7,907,945	636,145,630
630,451,434	7,969,096	638,420,529
632,658,541	8,030,466	640,689,007
634,859,028	8,092,055	642,951,082
637,052,913	8,153,863	645,206,776
639,240,216	8,215,890	647,456,106
641,420,957	8,278,137	649,699,094
643,595,156	8,340,603	651,935,759
645,762,833	8,403,288	654,166,120
647,924,006	8,466,192	656,390,198
650,078,696	8,529,315	658,608,011
652,226,922	8,592,658	660,819,580
654,368,703	8,656,219	663,024,923
656,504,059	8,720,000	665,224,059
658,633,009	8,784,000	667,417,009
660,755,572	8,848,219	669,603,791
662,871,767	8,912,658	671,784,425
664,981,614	8,977,315	673,958,929
667,085,131	9,042,192	676,127,323
669,182,338	9,107,288	678,289,625
671,273,253	9,172,603	680,445,855
673,357,895	9,238,137	682,596,032
675,436,283	9,303,890	684,740,174
677,508,436	9,369,863	686,878,299
679,574,373	9,436,055	689,010,428
681,634,112	9,502,466	691,136,578
683,687,672	9,569,096	693,256,767
685,735,071	9,635,945	695,371,016
687,776,327	9,703,014	697,479,341
689,811,460	9,770,301	699,581,762
691,840,488	9,837,808	701,678,296
693,863,428	9,905,534	703,768,963
695,880,300	9,973,479	705,853,780
697,891,121	10,041,644	707,932,765
699,895,910	10,110,027	710,005,937
701,894,684	10,178,630	712,073,314
703,887,462	10,247,452	714,134,914
705,874,262	10,316,493	716,190,755
707,855,101	10,385,753	718,240,854
709,829,998	10,455,233	720,285,230
711,798,970	10,524,932	722,323,901

12-Oct-2025

		Treasury top-up				
end of period	from Reserves	from Fees	total	% of total from fees	Treasury Spend	Deficit
Year 1	269,054,000	1,760,000	270,814,000	0.65%	275,000,000	-4,186,000
Year 2	226,590,720	3,122,192	229,712,912	1.36%	275,000,000	-45,287,088
Year 3	162,988,289	3,901,808	166,890,097	2.34%	275,000,000	-108,109,903
Year 4	139,341,064	5,264,000	144,605,064	3.64%	275,000,000	-130,394,936
Year 5	111,898,865	6,432,000	118,330,865	5.44%	275,000,000	-156,669,135
Deficit over 5y	-444,647,062					
Starting Treasury	1,500,000,000					
Treasury in 5y	1,055,352,938					
Treasury % change	-30%					

	Per Epoch	
	Reserves that go to Treasury	Reserves + Fees to Treasury
1,963,065	69,918	2,032,983
1,957,176	70,137	2,027,313
1,951,304	70,356	2,021,661
1,945,450	70,575	2,016,026
1,939,614	70,795	2,010,409
1,933,795	71,014	2,004,809
1,927,994	71,233	1,999,227
1,922,210	71,452	1,993,662
1,916,443	71,671	1,988,114
1,910,694	71,890	1,982,584
1,904,962	72,110	1,977,072
1,899,247	72,329	1,971,576
1,893,549	72,548	1,966,097
1,887,869	72,767	1,960,636
1,882,205	72,986	1,955,191
1,876,558	73,205	1,949,764
1,870,929	73,425	1,944,353
1,865,316	73,644	1,938,960
1,859,720	73,863	1,933,583
1,854,141	74,082	1,928,223
1,848,578	74,301	1,922,880
1,843,033	74,521	1,917,553
1,837,504	74,740	1,912,243
1,831,991	74,959	1,906,950
1,826,495	75,178	1,901,673
1,821,016	75,397	1,896,413
1,815,553	75,616	1,891,169
1,810,106	75,836	1,885,941
1,804,676	76,055	1,880,730
1,799,262	76,274	1,875,536
1,793,864	76,493	1,870,357
1,788,482	76,712	1,865,194
1,783,117	76,932	1,860,048
1,777,767	77,151	1,854,918
1,772,434	77,370	1,849,804
1,767,117	77,589	1,844,706
1,761,815	77,808	1,839,623
1,756,530	78,027	1,834,557
1,751,260	78,247	1,829,507
1,746,007	78,466	1,824,473
1,740,769	78,685	1,819,454
1,735,546	78,904	1,814,450
1,730,340	79,123	1,809,463
1,725,149	79,342	1,804,491
1,719,973	79,562	1,799,535
1,714,813	79,781	1,794,594
1,709,669	80,000	1,789,669
1,704,540	80,219	1,784,759
1,699,426	80,438	1,779,864

Cumulative			
Reserves that go to Treasury	Fees that go to Treasury	Reserves and Fees to Treasury	
713,762,035	10,594,849	724,356,884	
715,719,211	10,664,986	726,384,197	
717,670,515	10,735,342	728,405,857	
719,615,965	10,805,918	730,421,883	
721,555,579	10,876,712	732,432,292	
723,489,375	10,947,726	734,437,101	
725,417,369	11,018,959	736,436,327	
727,339,578	11,090,411	738,429,989	
729,256,022	11,162,082	740,418,104	
731,166,716	11,233,973	742,400,688	
733,071,677	11,306,082	744,377,760	
734,970,924	11,378,411	746,349,335	
736,864,474	11,450,599	748,315,433	
738,752,342	11,523,726	750,276,068	
740,634,547	11,596,712	752,231,260	
742,511,106	11,669,918	754,181,023	
744,382,034	11,743,342	756,125,377	
746,247,350	11,816,986	758,064,336	
748,107,070	11,890,849	759,997,919	
749,961,211	11,964,932	761,926,142	
751,809,789	12,039,233	763,849,022	
753,652,822	12,113,753	765,766,575	
755,490,325	12,188,493	767,678,818	
757,326,542	12,263,452	769,585,768	
759,148,811	12,338,630	771,487,442	
760,969,827	12,414,027	773,383,854	
762,785,379	12,489,644	775,275,023	
764,595,485	12,565,479	777,160,965	
766,400,161	12,641,534	779,041,695	
768,199,422	12,717,808	780,917,913	
769,993,286	12,794,301	782,787,587	
771,781,768	12,871,014	784,652,782	
773,564,885	12,947,945	786,512,830	
775,342,652	13,025,096	788,367,748	
777,115,086	13,102,466	790,217,552	
778,882,203	13,180,055	792,062,258	
780,644,018	13,257,863	793,901,881	
782,400,546	13,335,890	795,736,439	
784,151,809	13,414,137	797,565,946	
785,897,815	13,492,603	799,390,418	
787,638,584	13,571,288	801,209,871	
789,374,130	13,650,192	803,024,322	
791,104,470	13,729,315	804,833,785	
792,829,618	13,808,658	806,638,276	
794,549,591	13,888,219	808,437,811	
796,264,405	13,968,000	810,232,405	
797,974,073	14,048,000	812,022,073	
799,678,613	14,128,219	813,806,832	
801,378,039	14,208,658	815,586,697	

Cardano Parameters		Value
Current Epoch		588
Days in Epoch		5
Days in a Year		365
Epochs in a Year		73
Max Ada Supply		45,000,000,000
Current Ada Supply		38,169,230,015
Reserve Ada		6,830,769,985
Current Treasury Ada		1,500,000,000
Monetary Expansion		0.30%
Distribution to Treasury		20%
Fees per epoch in Ada		80,000
Fees growth per year		100%
NCL limit		275,000,000
Rho - A % of the Reserve that goes towards paying Reward in each epoch (e.g. 0.003 is 0.3%)		
Tau - A of the % Reward that goes towards Treasury in each epoch (e.g. 20%)		

end of period	Treasury top-up			% of total from fees	Treasury Spend	Deficit
	from Reserves	from Fees	total			
Year 1	269,054,000	1,760,000	270,814,000	0.65%	275,000,000	-4,186,000
Year 2	226,590,720	3,122,192	229,712,912	1.36%	275,000,000	-45,287,088
Year 3	162,988,289	3,901,808	166,890,097	2.34%	275,000,000	-108,109,903
Year 4	139,341,064	5,264,000	144,605,064	3.64%	275,000,000	-130,394,936
Year 5	111,898,865	6,432,000	118,330,865	5.44%	275,000,000	-156,669,135

Deficit over 5y	-444,647,062
Starting Treasury	1,500,000,000
Treasury in 5y	1,055,352,938
Treasury % change	-30%

Forecast of Cardano Reserves and Fees						
n	Days Fwd	Epoch	Start of Epoch Reserves	(1) Distribution from Reserves	(2) Fees	(3) = (1) + (2) Gross Rewards
295	1475	883	2,823,879,789	8,471,639	403,288	8,874,927
296	1480	884	2,815,408,149	8,446,224	404,384	8,850,608
297	1485	885	2,806,961,925	8,420,886	405,479	8,826,365
298	1490	886	2,798,541,039	8,395,623	406,575	8,802,198
299	1495	887	2,790,145,416	8,370,436	407,671	8,778,107
300	1500	888	2,781,774,980	8,345,325	408,767	8,754,092
301	1505	889	2,773,429,655	8,320,289	409,863	8,730,152
302	1510	890	2,765,109,366	8,295,328	410,959	8,706,287
303	1515	891	2,756,814,038	8,270,442	412,055	8,682,497
304	1520	892	2,748,543,596	8,245,631	413,151	8,658,781
305	1525	893	2,740,297,965	8,220,894	414,247	8,635,140
306	1530	894	2,732,077,071	8,196,231	415,342	8,611,574
307	1535	895	2,723,880,840	8,171,643	416,438	8,588,081
308	1540	896	2,715,709,197	8,147,128	417,534	8,564,662
309	1545	897	2,707,562,070	8,122,686	418,630	8,541,316
310	1550	898	2,699,439,383	8,098,318	419,726	8,518,044
311	1555	899	2,691,341,065	8,074,023	420,822	8,494,845
312	1560	900	2,683,267,042	8,049,801	421,918	8,471,719
313	1565	901	2,675,217,241	8,025,652	423,014	8,448,665
314	1570	902	2,667,191,589	8,001,575	424,110	8,425,684
315	1575	903	2,659,190,014	7,977,570	425,205	8,402,776
316	1580	904	2,651,212,444	7,953,637	426,301	8,379,939
317	1585	905	2,643,258,807	7,929,776	427,397	8,357,174
318	1590	906	2,635,329,031	7,905,987	428,493	8,334,480
319	1595	907	2,627,423,044	7,882,269	429,589	8,311,858
320	1600	908	2,619,540,774	7,858,622	430,685	8,289,307
321	1605	909	2,611,682,152	7,835,046	431,781	8,266,827
322	1610	910	2,603,847,106	7,811,541	432,877	8,244,418
323	1615	911	2,596,035,564	7,788,107	433,973	8,222,079
324	1620	912	2,588,247,458	7,764,742	435,068	8,199,811
325	1625	913	2,580,482,715	7,741,448	436,164	8,177,613
326	1630	914	2,572,741,267	7,718,224	437,260	8,155,484
327	1635	915	2,565,023,043	7,695,069	438,356	8,133,425
328	1640	916	2,557,327,974	7,671,984	439,452	8,111,436
329	1645	917	2,549,655,990	7,648,968	440,548	8,089,516
330	1650	918	2,542,007,022	7,626,021	441,644	8,067,665
331	1655	919	2,534,381,001	7,603,143	442,740	8,045,883
332	1660	920	2,526,777,858	7,580,334	443,836	8,024,169
333	1665	921	2,519,197,525	7,557,593	444,932	8,002,524
334	1670	922	2,511,639,932	7,534,920	446,027	7,980,947
335	1675	923	2,504,105,012	7,512,315	447,123	7,959,438
336	1680	924	2,496,592,697	7,489,778	448,219	7,937,997
337	1685	925	2,489,102,919	7,467,309	449,315	7,916,624
338	1690	926	2,481,635,610	7,444,907	450,411	7,895,318
339	1695	927	2,474,190,704	7,422,572	451,507	7,874,079
340	1700	928	2,466,768,131	7,400,304	452,603	7,852,907
341	1705	929	2,459,367,827	7,378,103	453,699	7,831,802
342	1710	930	2,451,989,724	7,355,969	454,795	7,810,764
343	1715	931	2,444,633,754	7,333,901	455,890	7,789,792

Per Epoch		
Reserves that go to Treasury	Fees that go to Treasury	Reserves + Fees to Treasury
1,694,328	80,658	1,774,985
1,689,245	80,877	1,770,122
1,684,177	81,096	1,765,273
1,679,125	81,315	1,760,440
1,674,087	81,534	1,755,621
1,669,065	81,753	1,750,818
1,664,058	81,973	1,746,030
1,659,066	82,192	1,741,257
1,654,088	82,411	1,736,499
1,649,126	82,630	1,731,756
1,644,179	82,849	1,727,028
1,639,246	83,068	1,722,315
1,634,329	83,288	1,717,616
1,629,426	83,507	1,712,932
1,624,537	83,726	1,708,263
1,619,664	83,945	1,703,609
1,614,805	84,164	1,698,969
1,609,960	84,384	1,694,344
1,605,130	84,603	1,689,733
1,600,315	84,822	1,685,137
1,595,514	85,041	1,680,555
1,590,727	85,260	1,675,988
1,585,955	85,479	1,671,435
1,581,197	85,699	1,666,896
1,576,454	85,918	1,662,372
1,571,724	86,137	1,657,861
1,567,009	86,356	1,653,365
1,562,308	86,575	1,648,884
1,557,621	86,795	1,644,416
1,552,948	87,014	1,639,962
1,548,290	87,233	1,635,523
1,543,645	87,452	1,631,097
1,539,014	87,671	1,626,685
1,534,397	87,890	1,622,287
1,529,794	88,110	1,617,903
1,525,204	88,329	1,613,533
1,520,629	88,548	1,609,177
1,516,067	88,767	1,604,834
1,511,519	88,986	1,600,505
1,506,984	89,205	1,596,189
1,502,463	89,425	1,591,888
1,497,956	89,644	1,587,599
1,493,462	89,863	1,583,325
1,488,981	90,082	1,579,064
1,484,514	90,301	1,574,816
1,480,061	90,521	1,570,581
1,475,621	90,740	1,566,360
1,471,194	90,959	1,562,153
1,466,780	91,178	1,557,958

Cumulative		
Reserves that go to Treasury	Fees that go to Treasury	Reserves and Fees to Treasury
803,072,367	14,289,315	817,361,682
804,761,612	14,370,192	819,131,804
806,445,789	14,451,288	820,897,077
808,124,914	14,532,603	822,657,517
809,799,001	14,614,137	824,413,138
811,468,066	14,695,890	826,163,956
813,132,124	14,777,863	827,909,987
814,791,189	14,860,055	829,651,244
816,445,278	14,942,466	831,387,744
818,094,404	15,025,096	833,119,500
819,738,583	15,107,945	834,846,528
821,377,829	15,191,014	836,568,843
823,012,158	15,274,301	838,286,459
824,641,583	15,357,808	839,999,391
826,266,120	15,441,534	841,707,655
827,885,784	15,525,479	843,411,263
829,500,589	15,609,644	845,110,232
831,110,549	15,694,027	846,804,576
832,715,679	15,778,630	848,494,309
834,315,994	15,863,452	850,179,446
835,911,508	15,948,493	851,860,001
837,502,236	16,033,753	853,535,989
839,088,191	16,119,233	855,207,424
840,669,388	16,204,932	856,874,320
842,245,842	16,290,849	858,536,691
843,817,567	16,376,986	860,194,553
845,384,576	16,463,342	861,847,918
846,946,884	16,549,918	863,496,802
848,504,505	16,636,712	865,141,218
850,057,454	16,723,726	866,781,180
851,605,744	16,810,959	868,416,702
853,149,388	16,898,411	870,047,799
854,688,402	16,986,082	871,674,484
856,222,799	17,073,973	873,296,772
857,752,593	17,162,082	874,914,675
859,277,797	17,250,411	876,528,208
860,798,425	17,338,959	878,137,384
862,314,492	17,427,726	879,742,218
863,826,011	17,516,712	881,342,723
865,332,995	17,605,918	882,938,912
866,835,458	17,695,342	884,530,800
868,333,413	17,784,986	886,118,399
869,826,875	17,874,849	887,701,724
871,315,856	17,964,932	889,280,788
872,800,371	18,055,233	890,855,604
874,280,432	18,145,753	892,426,185
875,756,052	18,236,493	893,992,545
877,227,246	18,327,452	895,554,698
878,694,026	18,418,630	897,112,657

Last updated

12-Oct-2025

Cardano Parameters	Value
Current Epoch	588
Days in Epoch	5
Days in a Year	365
Epochs in a Year	73
Max Ada Supply	45,000,000,000
Current Ada Supply	38,169,230,015
Reserve Ada	6,830,769,985
Current Treasury Ada	1,500,000,000
Monetary Expansion	0.30%
Distribution to Treasury	20%
Fees per epoch in Ada	80,000
Fees growth per year	100%
NCL limit	275,000,000

Rho - A % of the Reserve that goes towards paying Reward in each epoch (e.g. 0.003 is 0.3%)
Tau - A of the % Reward that goes towards Treasury in each epoch (e.g. 20%)

Forecast of Cardano Reserves and Fees						
n	Days Fwd	Epoch	Start of Epoch Reserves	(1) Distribution from Reserves	(2) Fees	(3) = (1) + (2) Gross Rewards
344	1720	932	2,437,299,853	7,311,900	456,986	7,768,886
345	1725	933	2,429,987,954	7,289,964	458,082	7,748,046
346	1730	934	2,422,697,990	7,268,094	459,178	7,727,272
347	1735	935	2,415,429,896	7,246,290	460,274	7,706,564
348	1740	936	2,408,183,606	7,224,551	461,370	7,685,921
349	1745	937	2,400,959,055	7,202,877	462,466	7,665,343
350	1750	938	2,393,756,178	7,181,269	463,562	7,644,830
351	1755	939	2,386,574,910	7,159,725	464,658	7,624,382
352	1760	940	2,379,415,185	7,138,246	465,753	7,603,999
353	1765	941	2,372,276,939	7,116,831	466,849	7,583,680
354	1770	942	2,365,160,108	7,095,480	467,945	7,563,426
355	1775	943	2,358,064,628	7,074,194	469,041	7,543,235
356	1780	944	2,350,990,434	7,052,971	470,137	7,523,108
357	1785	945	2,343,937,463	7,031,812	471,233	7,503,045
358	1790	946	2,336,905,651	7,010,717	472,329	7,483,046
359	1795	947	2,329,894,934	6,989,685	473,425	7,463,109
360	1800	948	2,322,905,249	6,968,716	474,521	7,443,236
361	1805	949	2,315,936,533	6,947,810	475,616	7,423,426
362	1810	950	2,308,988,723	6,926,966	476,712	7,403,678
363	1815	951	2,302,061,757	6,906,185	477,808	7,383,993
364	1820	952	2,295,155,572	6,885,467	478,904	7,364,371
365	1825	953	2,288,270,105	6,864,810	480,000	7,344,810

end of period	Treasury top-up			% of total from fees
	from Reserves	from Fees	total	
Year 1	269,054,000	1,760,000	270,814,000	0.65%
Year 2	226,590,720	3,122,192	229,712,912	1.36%
Year 3	162,988,289	3,901,808	166,890,097	2.34%
Year 4	139,341,064	5,264,000	144,605,064	3.64%
Year 5	111,898,865	6,432,000	118,330,865	5.44%

Treasury Spend	Deficit
275,000,000	-4,186,000
275,000,000	-45,287,088
275,000,000	-108,109,903
275,000,000	-130,394,936
275,000,000	-156,669,135

Deficit over 5y	-444,647,062
Starting Treasury	1,500,000,000
Treasury in 5y	1,055,352,938
Treasury % change	-30%

Per Epoch		
Reserves that go to Treasury	Fees that go to Treasury	Reserves + Fees to Treasury
1,462,380	91,397	1,553,777
1,457,993	91,616	1,549,609
1,453,619	91,836	1,545,454
1,449,258	92,055	1,541,313
1,444,910	92,274	1,537,184
1,440,575	92,493	1,533,069
1,436,254	92,712	1,528,966
1,431,945	92,932	1,524,876
1,427,649	93,151	1,520,800
1,423,366	93,370	1,516,736
1,419,096	93,589	1,512,685
1,414,839	93,808	1,508,647
1,410,594	94,027	1,504,622
1,406,362	94,247	1,500,609
1,402,143	94,466	1,496,609
1,397,937	94,685	1,492,622
1,393,743	94,904	1,488,647
1,389,562	95,123	1,484,685
1,385,393	95,342	1,480,736
1,381,237	95,562	1,476,799
1,377,093	95,781	1,472,874
1,372,962	96,000	1,468,962

Cumulative		
Reserves that go to Treasury	Fees that go to Treasury	Reserves and Fees to Treasury
880,156,406	18,510,027	898,666,434
881,614,399	18,601,644	900,216,043
883,068,018	18,693,479	901,761,497
884,517,276	18,785,534	903,302,810
885,962,186	18,877,808	904,839,994
887,402,761	18,970,301	906,373,063
888,839,015	19,063,014	907,902,029
890,270,960	19,155,945	909,426,905
891,698,609	19,249,096	910,947,705
893,121,975	19,342,466	912,464,441
894,541,071	19,436,055	913,977,126
895,955,910	19,529,863	915,485,773
897,366,504	19,623,890	916,990,395
898,772,867	19,718,137	918,491,004
900,175,010	19,812,603	919,987,613
901,572,947	19,907,288	921,480,235
902,966,690	20,002,192	922,968,882
904,356,252	20,097,315	924,453,567
905,741,646	20,192,658	925,934,303
907,122,883	20,288,219	927,411,102
908,499,976	20,384,000	928,883,976
909,872,938	20,480,000	930,352,938