

## NATIONAL HURRICANE CENTER

11691 SW 17<sup>th</sup> Street Miami, FL 33165

www.hurricanes.gov Facebook Twitter

## Costliest U.S. tropical cyclones tables updated

NOAA's National Centers for Environmental Information (NCEI) in consultation with the National Hurricane Center (NHC) has updated the listing of costliest tropical cyclones to strike the United States mainland. This listing was previously found in the NOAA memorandum *The Deadliest, Costliest and Most Intense U.S. Tropical Cyclones,* linked at <a href="https://www.nhc.noaa.gov/pdf/nws-nhc-6.pdf">https://www.nhc.noaa.gov/pdf/nws-nhc-6.pdf</a>

These new tables listed below replace Tables 3a and 3b in the above document. The first table (3a), not adjusted for inflation, lists 36 tropical cyclones from 1900 to 2017 that caused at least 1 billion dollars in damage on the U.S. mainland, and another five striking U.S. territories or Hawaii. The second table (3b) accounts for inflation to 2017 dollars.

For all United States hurricanes, Katrina (2005) is the costliest storm on record. Hurricane Harvey (2017) ranks second, Hurricane Maria (2017) ranks third, Hurricane Sandy (2012) ranks fourth and Hurricane Irma (2017) ranks fifth. Hurricane Maria is the costliest hurricane on record to strike Puerto Rico and the U.S Virgin Islands.

The NCEI data set provides more loss information than previous damage figures used by NHC, including agriculture, individual payouts, and disaster money from the federal government to the respective states. In performing these disaster cost assessments, NCEI examined statistics from a wide variety of sources. Using the latest scientific methodology, it determined the estimated total costs of these events - that is, the costs in terms of dollars that would not have been incurred had the event not taken place. Insured and uninsured losses are included in damage estimates. Sources include the National Weather Service, the Federal Emergency Management Agency, U.S. Department of Agriculture, National Interagency Fire Center, U.S. Army Corps of Engineers, individual state emergency management agencies, state and regional climate centers, media reports, and insurance industry estimates.

Additional information on the methodology is at <a href="https://www.ncdc.noaa.gov/billions/">https://www.ncdc.noaa.gov/billions/</a>

**Contact:** NHC Public Affairs – <u>nhc.public.affairs@noaa.gov</u>

January 26, 2018

RANK	TROPICAL CYCLONE		CATEGORY	DAMAGE (U.S.)
1	KATRINA (SE FL, LA, MS)	2005	3	\$125,000,000,000
1	HARVEY (TX, LA)	2017	4	\$125,000,000,000
4	SANDY (Mid-Atlantic & NE US)	2012	1	65,000,000,000
5	IRMA (FL)	2017	4	50,000,000,000
6	IKE (TX, LA)	2008	2	30,000,000,000
7	ANDREW (SE FL/LA)	1992	5	27,000,000,000
8	<i>IVAN</i> (AL/NW FL)	2004	3	20,500,000,000
9	WILMA (S FL)	2005	3	19,000,000,000
10	RITA (SW LA, N TX)	2005	3	18,500,000,000
11	CHARLEY (SW FL)	2004	4	16,000,000,000
12	IRENE (Mid-Atlantic & NE US)	2011	1	13,500,000,000
13	MATTHEW (SE US)	2016	1	10,000,000,000
14	FRANCES (FL)	2004	2	9,800,000,000
15	ALLISON (N TX)	2001	TS	8,500,000,000
16	JEANNE (FL)	2004	3	7,500,000,000
17	HUGO (SC)	1989	4	7,000,000,000
18	FLOYD (Mid-Atlantic & NE U.S.)	1999	2	6,500,000,000
19	GUSTAV (LA)	2008	2	6,000,000,000
20	ISABEL (Mid-Atlantic)	2003	2	5,500,000,000
21	FRAN (NC)	1996	3	5,000,000,000
22	OPAL (NW FL)	1995	3	4,700,000,000
25	ALICIA (N TX)	1983	3	3,000,000,000
26	ISAAC (LA)	2012	1	2,800,000,000
27	GEORGES (FL Keys, MS, AL)	1998	2	2,500,000,000
27	DENNIS (NW FL)	2005	3	2,500,000,000
29	AGNES (FL/NE U.S.)	1972	1	2,100,000,000
32	FREDERIC (AL/MS)	1979	3	1,700,000,000
33	BOB (NC, NE U.S)	1991	2	1,500,000,000
33	JUAN (LA)	1985	1	1,500,000,000
35	CAMILLE (MS/SE LA/VA)	1969	5	1,420,700,000
36	BETSY (SE FL/SE LA)	1965	3	1,420,500,000
37	ELENA (MS/AL/NW FL)	1985	3	1,300,000,000
37	DOLLY (S TX)	2008	1	1,300,000,000
39	LILI (SC LA)	2002	1	1,100,000,000
40	ALBERTO (AL, GA)	1994	TS	1,030,000,000
41	BONNIE (Mid-Atlantic)	1998	2	1,000,000,000
DDEN	IDUM			
3	MARIA (PR, USVI)	2017	4	90,000,000,000
23	GEORGES (USVI,PR)	1998	3	3,500,000,000
24	INIKI (Kauai, HI)	1992	4	3,100,000,000
29	MARILYN (USVI, PR)	1995	2	2,100,000,000
31	HUGO (USVI, PR)	1989	4	2,000,000,000

Table 3a. Mainland United States tropical cyclones causing at least 1 billion dollars of damage, 1900-2017, (not adjusted for inflation).

	TROPICAL CYCLONE		CATEGORY	DAMAGE (U.S.)
1	KATRINA (SE FL, LA, MS)	2005	3	\$160,000,000,000
2	HARVEY (TX, LA)	2017	4	\$125,000,000,000
4	SANDY (Mid-Atlantic & NE US)	2012	1	70,200,000,000
5	IRMA (FL)	2017	4	50,000,000,000
6	ANDREW (SE FL/LA)	1992	5	47,790,000,000
7	IKE (TX, LA)	2008	2	34,800,000,000
8	IVAN (AL/NW FL)	2004	3	27,060,000,000
9	WILMA (S FL)	2005	3	24,320,000,000
10	RITA (SW LA, N TX)	2005	3	23,680,000,000
11	CHARLEY (SW FL)	2004	4	21,120,000,000
12	IRENE (Mid-Atlantic & NE US)	2011	1	14,985,000,000
13	HUGO (SC)	1989	4	14,070,000,000
14	FRANCES (FL)	2004	2	12,936,000,000
15	AGNES (FL/NE U.S.)	1972	- 1	12,516,000,000
16	ALLISON (N TX)	2001	TS	11,815,000,000
17	BETSY (SE FL/SE LA)	1965	3	11,152,000,000
18	MATTHEW (SE US)	2016	1	10,300,000,000
19	JEANNE (FL)	2010	3	9,900,000,000
20	CAMILLE (MS/SE LA/VA)	1969	5	9,776,000,000
20 21	FLOYD (Mid-Atlantic & NE U.S.)	1909	2	9,620,000,000
21	FRAN (NC)	1999	2	7,900,000,000
23	DIANE (NC)	1955	1	7,630,000,000
23 24	OPAL (NW FL)	1995	3	7,614,000,000
24 25	ALICIA (N TX)	1993	3	7,470,000,000
26	ISABEL (Mid-Atlantic)	2003	2	7,370,000,000
27	GUSTAV (LA)	2008	2	6,960,000,000
28	CELIA (TX)	1970	3	6,026,000,000
20 29	FREDERIC (AL/MS)	1970	3	5,712,000,000
29 32	LONG ISLAND EXPRESS (NE US)	1979	3	5,279,000,000
32 33	NC/VA 1944 (Mid-Atlantic)	1938	3	4,927,000,000
33 34	CAROL (NE US)	1944 1954	3	4,927,000,000
34 36	GEORGES (FL Keys, MS, AL)	1954 1998	3 2	4,198,000,000 3,775,000,000
38	DONNA (FL, Eastern US)	1998	4	3,235,000,000
30 39	DENNIS (NW FL)	2005	4	3,200,000,000
39 40	ISAAC (LA)	2005	3 1	3,024,000,000
40 41	ELENA (MS/AL/NW FL)	2012 1985	3	3,003,000,000
		1903	5	3,003,000,000
DDEN	IDUM			
3	MARIA (PR, USVI)	2017	4	90,000,000,000
30	<i>INIKI</i> (Kauai, HI)	1992	4	5,487,000,000
31	GEORGES (USVI,PR)	1998	3	5,285,000,000
35	HUGO (USVI, PR)	1989	4	4,020,000,000
37	MARILYN (USVI, PR)	1995	2	3,402,000,000

Table 3b. Costliest mainland United States tropical cyclones, 1900-2017, after accounting for inflation to2017 dollars.