Allocating Resources After a Major Weather Event: HURRICANE HARVEY 2017

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Background and Scope

Section 1: Import the Data

You may use an import function. If not using an import function, include the code used to import the data (it may be generated from the Import Tool)

```
filename = "StormEvents_2017_finalProject.csv";
Hharvey = importfile1(filename);
% Reorder months
monthOrder = ["January", "February", "March", "April", "May", "June", "July", "August", "September", "Odd
Hharvey.Month = reordercats(Hharvey.Month, monthOrder)
```

Hharvey = 57005×24 table

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	113355	678791	NEW JERSEY	2017	April	Thunderstorm Wind	GLOUCESTER
2	113459	679228	FLORIDA	2017	April	Tornado	LEE
3	113448	679268	ОНЮ	2017	April	Thunderstorm Wind	GREENE
4	113697	682042	ОНЮ	2017	April	Flood	CLERMONT
5	113683	682062	NEBRASKA	2017	April	Hail	CASS
6	114718	688082	INDIANA	2017	April	Flash Flood	SWITZERLAND
7	114834	688895	VIRGINIA	2017	April	Thunderstorm Wind	WESTMOREL
8	121068	724772	GULF OF	2017	October	Marine Thunders	ATCHAFALA

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
9	114489	686560	ОНЮ	2017	April	Flash Flood	CLERMONT
10	113683	682156	NEBRASKA	2017	April	Thunderstorm Wind	BURT
11	115066	690966	ARKANSAS	2017	April	Hail	FRANKLIN
12	121162	725317	OKLAHOMA	2017	October	Hail	KIOWA
13	120474	721817	ATLANTIC	2017	October	Marine Strong W	DE BAY WA
14	120474	721818	ATLANTIC	2017	October	Marine High Wind	DE BAY WA
15	112855	675876	PENNSYLV	2017	March	Winter Weather	MONROE
16	112855	675879	PENNSYLV	2017	March	Winter Weather	LOWER BUCKS
17	112855	675877	PENNSYLV	2017	March	Winter Weather	WESTERN M
18	113797	681330	WISCONSIN	2017	February	Winter Weather	ROCK
19	113797	681332	WISCONSIN	2017	February	Winter Weather	WALWORTH
20	115634	694778	GULF OF	2017	June	Marine Thunders	COASTAL W
21	115688	695188	FLORIDA	2017	June	Thunderstorm Wind	CHARLOTTE
22	115811	696020	GULF OF	2017	June	Marine Thunders	ENGLEWOOD.
23	115811	696023	GULF OF	2017	June	Marine Thunders	ENGLEWOOD.
24	115752	695727	MONTANA	2017	June	Hail	CUSTER
25	115752	695729	MONTANA	2017	June	Hail	TREASURE
26	115752	695740	MONTANA	2017	June	Thunderstorm Wind	YELLOWSTON
27	113797	681331	WISCONSIN	2017	February	Winter Weather	WAUKESHA
28	113797	681333	WISCONSIN	2017	February	Winter Weather	MILWAUKEE
29	113797	681334	WISCONSIN	2017	February	Winter Weather	RACINE
30	113797	681336	WISCONSIN	2017	February	Winter Weather	KENOSHA
31	115176	691471	GULF OF	2017	June	Waterspout	ENGLEWOOD.
32	115176	691472	GULF OF	2017	June	Waterspout	TAMPA BAY
33	115634	694777	GULF OF	2017	June	Marine Thunders	ENGLEWOOD.
34	112855	675883	PENNSYLV	2017	March	Winter Weather	EASTERN M
35	113797	681282	WISCONSIN	2017	February	Winter Weather	MARQUETTE
36	115811	696124	GULF OF	2017	June	Marine Thunders	ENGLEWOOD.
37	115811	696134	GULF OF	2017	June	Marine Thunders	CHARLOTTE
38	115811	696176	GULF OF	2017	June	Marine Thunders	COASTAL W
39	115811	696179	GULF OF	2017	June	Marine Thunders	CHARLOTTE
40	115902	696463	FLORIDA	2017	June	Thunderstorm Wind	HILLSBORO
41	115904	696474	GULF OF	2017	June	Marine Thunders	CHARLOTTE
42	115940	696653	GULF OF	2017	June	Marine Thunders	TAMPA BAY

	EpisodeID	Event ID	State	Year	Month	Event_Type	CZ Name
43	116635	701349	FLORIDA	2017	June	Flash Flood	LEON
44	116635	701350	FLORIDA	2017	June	Flash Flood	LEON
45	116635	701351	FLORIDA	2017	June	Flash Flood	LEON
46	116636	701352	FLORIDA	2017	June	Flash Flood	BAY
47	116636	701353	FLORIDA	2017	June	Flash Flood	WASHINGTON
48	116636	701354	FLORIDA	2017	June	Flood	WALTON
49	116636	701355	FLORIDA	2017	June	Flood	WALTON
50	115691	698754	MISSOURI	2017	June	Thunderstorm Wind	CHRISTIAN
51	115691	698756	MISSOURI	2017	June	Thunderstorm Wind	GREENE
52	116224	698777	KANSAS	2017	June	Hail	CRAWFORD
53	116224	698778	KANSAS	2017	June	Hail	CRAWFORD
54	116224	698779	KANSAS	2017	June	Thunderstorm Wind	CRAWFORD
55	116224	698780	KANSAS	2017	June	Thunderstorm Wind	CRAWFORD
56	116224	698781	KANSAS	2017	June	Thunderstorm Wind	CRAWFORD
57	116224	698782	KANSAS	2017	June	Hail	CHEROKEE
58	115691	698760	MISSOURI	2017	June	Thunderstorm Wind	TANEY
59	115691	698761	MISSOURI	2017	June	Thunderstorm Wind	STONE
60	115691	698762	MISSOURI	2017	June	Thunderstorm Wind	TANEY
61	115691	698763	MISSOURI	2017	June	Thunderstorm Wind	TANEY
62	115691	698764	MISSOURI	2017	June	Thunderstorm Wind	HOWELL
63	115691	698765	MISSOURI	2017	June	Heavy Rain	GREENE
64	115691	698766	MISSOURI	2017	June	Heavy Rain	GREENE
65	116222	698768	MISSOURI	2017	June	Flash Flood	GREENE
66	116222	698769	MISSOURI	2017	June	Flash Flood	GREENE
67	116222	698770	MISSOURI	2017	June	Hail	GREENE
68	116636	701356	FLORIDA	2017	June	Flood	WALTON
69	116636	701357	FLORIDA	2017	June	Flood	WALTON
70	115330	692444	ATLANTIC	2017	June	Marine Thunders	VOLUSIA-B
71	115330	692448	ATLANTIC	2017	June	Marine Thunders	VOLUSIA-B
72	115330	692453	ATLANTIC	2017	June	Marine Thunders	VOLUSIA-B
73	115691	698751	MISSOURI	2017	June	Lightning	DOUGLAS
74	115691	698752	MISSOURI	2017	June	Thunderstorm Wind	GREENE
75	115691	698753	MISSOURI	2017	June	Thunderstorm Wind	GREENE
76	115691	698757	MISSOURI	2017	June	Thunderstorm Wind	GREENE

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
77	115691	698758	MISSOURI	2017	June	Thunderstorm Wind	GREENE
78	115691	698759	MISSOURI	2017	June	Thunderstorm Wind	GREENE
79	116222	698771	MISSOURI	2017	June	Thunderstorm Wind	GREENE
80	116222	698772	MISSOURI	2017	June	Thunderstorm Wind	GREENE
81	116222	698773	MISSOURI	2017	June	Thunderstorm Wind	GREENE
82	116222	698774	MISSOURI	2017	June	Thunderstorm Wind	GREENE
83	116224	698775	KANSAS	2017	June	Hail	CRAWFORD
84	116224	698776	KANSAS	2017	June	Hail	CRAWFORD
85	116224	698783	KANSAS	2017	June	Thunderstorm Wind	CHEROKEE
86	116224	698784	KANSAS	2017	June	Thunderstorm Wind	CRAWFORD
87	116224	698785	KANSAS	2017	June	Thunderstorm Wind	BOURBON
88	115940	696657	GULF OF	2017	June	Waterspout	ENGLEWOOD
89	115968	696991	FLORIDA	2017	June	Thunderstorm Wind	CHARLOTTE
90	115966	697003	GULF OF	2017	June	Marine Thunders	TAMPA BAY
91	115966	697015	GULF OF	2017	June	Marine Thunders	TAMPA BAY
92	115992	697128	GULF OF	2017	June	Waterspout	ENGLEWOOD
93	116634	701344	ALABAMA	2017	June	Thunderstorm Wind	GENEVA
94	116632	701345	ALABAMA	2017	June	Thunderstorm Wind	GENEVA
95	116224	698786	KANSAS	2017	June	Thunderstorm Wind	CRAWFORD
96	116224	698787	KANSAS	2017	June	Thunderstorm Wind	CRAWFORD
97	116224	698788	KANSAS	2017	June	Thunderstorm Wind	CHEROKEE
98	116224	698789	KANSAS	2017	June	Thunderstorm Wind	CHEROKEE
99	116224	698790	KANSAS	2017	June	Thunderstorm Wind	BOURBON
100	116225	698801	MISSOURI	2017	June	Thunderstorm Wind	VERNON

```
Hharvey = Hharvey(Hharvey.Begin_Date_Time >= '2017-08-17 00:00:00' & Hharvey.Begin_Date_Time <
Hharvey = Hharvey(Hharvey.End_Date_Time >= '2017-08-17 00:00:00' & Hharvey.End_Date_Time < '2011
Hharvey = Hharvey(Hharvey.Property_Cost >= 1,:);
Hharvey = Hharvey(ismember(Hharvey.State,{'ARKANSAS','KENTUCKY','LOUISIANA','MISSISSIPPI','NORTONIANA', 'MISSISSIPPI', 'NORTONIANA', 'MISSISSIPPI',
```

Hharvey = 201×24 table

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	119753	723472	TEXAS	2017	August	Tropical Storm	MONTGOMERY
2	118750	713329	MISSISSI	2017	September	Strong Wind	LOWNDES

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
3	119753	723473	TEXAS	2017	August	Tropical Storm	FORT BEND
4	120636	722619	NORTH CA	2017	September	Thunderstorm Wind	RICHMOND
5	120636	722623	NORTH CA	2017	September	Thunderstorm Wind	WAYNE
6	120636	722626	NORTH CA	2017	September	Thunderstorm Wind	LEE
7	120636	722627	NORTH CA	2017	September	Thunderstorm Wind	LEE
8	119753	723449	TEXAS	2017	August	Tropical Storm	GALVESTON
9	119753	723474	TEXAS	2017	August	Tropical Storm	SAN JACINTO
10	120636	722628	NORTH CA	2017	September	Thunderstorm Wind	HARNETT
11	120636	722631	NORTH CA	2017	September	Thunderstorm Wind	MOORE
12	120636	722632	NORTH CA	2017	September	Thunderstorm Wind	HARNETT
13	120636	722634	NORTH CA	2017	September	Thunderstorm Wind	JOHNSTON
14	120636	722637	NORTH CA	2017	September	Thunderstorm Wind	HOKE
15	120636	722638	NORTH CA	2017	September	Thunderstorm Wind	WAKE
16	120636	722639	NORTH CA	2017	September	Thunderstorm Wind	FRANKLIN
17	119753	723475	TEXAS	2017	August	Tropical Storm	WALKER
18	119753	723648	TEXAS	2017	August	Tropical Storm	POLK
19	119821	718430	KENTUCKY	2017	September	Flash Flood	TODD
20	118746	713318	MISSISSI	2017	August	Thunderstorm Wind	LAMAR
21	118746	713322	MISSISSI	2017	August	Strong Wind	GRENADA
22	119746	719493	TEXAS	2017	August	Flash Flood	HARDIN
23	119746	719496	TEXAS	2017	August	Flash Flood	JASPER
24	119746	719497	TEXAS	2017	August	Flash Flood	NEWTON
25	120636	722624	NORTH CA	2017	September	Thunderstorm Wind	RANDOLPH
26	120464	723037	NORTH CA	2017	September	Flash Flood	MECKLENBURG
27	120464	723039	NORTH CA	2017	September	Heavy Rain	IREDELL
28	117836	708282	TEXAS	2017	August	Thunderstorm Wind	BRISCOE
29	118746	713323	MISSISSI	2017	August	Flood	LAMAR
30	118746	713328	MISSISSI	2017	August	Thunderstorm Wind	LOWNDES
31	118746	713321	MISSISSI	2017	August	Strong Wind	ATTALA
32	118746	713326	MISSISSI	2017	August	Thunderstorm Wind	LOWNDES
33	118746	713327	MISSISSI	2017	August	Thunderstorm Wind	LOWNDES
34	119746	719740	TEXAS	2017	August	Thunderstorm Wind	JASPER
35	120145	719894	TENNESSEE	2017	August	Flash Flood	DAVIDSON
36	120636	722621	NORTH CA	2017	September	Thunderstorm Wind	MOORE

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
37	120636	722618	NORTH CA	2017	September	Hail	HARNETT
38	119853	718515	TEXAS	2017	August	Thunderstorm Wind	ECTOR
39	118099	709783	KENTUCKY	2017	August	Thunderstorm Wind	PENDLETON
40	120145	719849	TENNESSEE	2017	August	Tornado	PERRY
41	120145	719850	TENNESSEE	2017	August	Tornado	MAURY
42	120145	719851	TENNESSEE	2017	August	Thunderstorm Wind	DAVIDSON
43	119746	719342	TEXAS	2017	August	Flash Flood	JEFFERSON
44	120145	719854	TENNESSEE	2017	August	Tornado	DAVIDSON
45	120145	719856	TENNESSEE	2017	August	Tornado	DAVIDSON
46	117997	709332	KENTUCKY	2017	August	Thunderstorm Wind	FAYETTE
47	117997	709333	KENTUCKY	2017	August	Thunderstorm Wind	FAYETTE
48	120636	722616	NORTH CA	2017	September	Hail	WAKE
49	118032	709521	TEXAS	2017	August	Thunderstorm Wind	LUBBOCK
50	118032	709525	TEXAS	2017	August	Thunderstorm Wind	HOCKLEY
51	120145	719885	TENNESSEE	2017	August	Strong Wind	DAVIDSON
52	120145	719886	TENNESSEE	2017	August	Strong Wind	DICKSON
53	120145	719901	TENNESSEE	2017	August	Strong Wind	SUMNER
54	119527	717282	NORTH CA	2017	August	Thunderstorm Wind	WAKE
55	120120	719742	LOUISIANA	2017	August	Flood	CAMERON
56	120120	719749	LOUISIANA	2017	August	Flash Flood	CALCASIEU
57	118746	713316	MISSISSI	2017	August	Tornado	JEFFERSON
58	118746	713315	MISSISSI	2017	August	Tornado	FORREST
59	118397	711489	KENTUCKY	2017	September	Flash Flood	HART
60	118745	713312	MISSISSI	2017	August	Flash Flood	MARION
61	118749	713324	ARKANSAS	2017	August	Strong Wind	ASHLEY
62	119527	717284	NORTH CA	2017	August	Thunderstorm Wind	JOHNSTON
63	119527	717285	NORTH CA	2017	August	Thunderstorm Wind	JOHNSTON
64	119527	717286	NORTH CA	2017	August	Thunderstorm Wind	JOHNSTON
65	119527	717287	NORTH CA	2017	August	Thunderstorm Wind	JOHNSTON
66	119527	717288	NORTH CA	2017	August	Thunderstorm Wind	SAMPSON
67	120120	719755	LOUISIANA	2017	August	Flash Flood	BEAUREGARD
68	118397	711491	KENTUCKY	2017	September	Flash Flood	BARREN
69	118397	711492	KENTUCKY	2017	September	Flash Flood	LOGAN
70	118397	711494	KENTUCKY	2017	September	Flash Flood	LOGAN

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
71	118749	713325	ARKANSAS	2017	August	Flood	CHICOT
72	120257	720575	NORTH CA	2017	August	Thunderstorm Wind	FRANKLIN
73	120192	720189	NORTH CA	2017	August	Thunderstorm Wind	WILKES
74	120192	720190	NORTH CA	2017	August	Lightning	WILKES
75	120120	720001	LOUISIANA	2017	August	Tornado	CAMERON
76	120120	720002	LOUISIANA	2017	August	Tornado	VERMILION
77	120192	720192	NORTH CA	2017	August	Thunderstorm Wind	WILKES
78	120192	720194	NORTH CA	2017	August	Thunderstorm Wind	WILKES
79	118397	711490	KENTUCKY	2017	September	Flash Flood	BARREN
80	120192	720191	NORTH CA	2017	August	Lightning	WILKES
81	120120	720006	LOUISIANA	2017	August	Tornado	ACADIA
82	120253	720513	NORTH CA	2017	August	Thunderstorm Wind	ROBESON
83	120253	720517	NORTH CA	2017	August	Thunderstorm Wind	COLUMBUS
84	120460	721707	TENNESSEE	2017	September	Strong Wind	HUMPHREYS
85	120460	721708	TENNESSEE	2017	September	Strong Wind	HOUSTON
86	120120	720007	LOUISIANA	2017	August	Tornado	CAMERON
87	120460	721709	TENNESSEE	2017	September	Strong Wind	STEWART
88	120460	721710	TENNESSEE	2017	September	Strong Wind	MONTGOMERY
89	120460	721713	TENNESSEE	2017	September	Flash Flood	CHEATHAM
90	120460	721712	TENNESSEE	2017	September	Flash Flood	DAVIDSON
91	120460	721714	TENNESSEE	2017	September	Flash Flood	SUMNER
92	119874	718584	ARKANSAS	2017	August	Thunderstorm Wind	WASHINGTON
93	119874	718585	ARKANSAS	2017	August	Thunderstorm Wind	WASHINGTON
94	119874	718588	ARKANSAS	2017	August	Thunderstorm Wind	WASHINGTON
95	119874	718589	ARKANSAS	2017	August	Hail	WASHINGTON
96	119874	718590	ARKANSAS	2017	August	Hail	WASHINGTON
97	120460	721715	TENNESSEE	2017	September	Flash Flood	MONTGOMERY
98	119746	719489	TEXAS	2017	August	Flash Flood	ORANGE
99	119746	719494	TEXAS	2017	August	Flash Flood	TYLER
100	119874	718593	ARKANSAS	2017	August	Hail	WASHINGTON

```
Hharvey.Event_Type = addcats(Hharvey.Event_Type,{'<New Category>'});
Hharvey.Event_Type = renamecats(Hharvey.Event_Type,'<New Category>','Harvey');
```

. . .

Hharvey = 201×24 table

	FriendalD	Front ID	04-4-	V	NA Al-	Front Ton	07 Name
4	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	119753	723472	TEXAS	2017	August	Tropical Storm	MONTGOMERY
2	118750	713329	MISSISSI	2017	September	Strong Wind	LOWNDES
3	119753	723473	TEXAS	2017	August	Tropical Storm	FORT BEND
4	120636	722619	NORTH CA	2017	September	Harvey	RICHMOND
5	120636	722623	NORTH CA	2017	September	Harvey	WAYNE
6	120636	722626	NORTH CA	2017	September	Harvey	LEE
7	120636	722627	NORTH CA	2017	September	Harvey	LEE
8	119753	723449	TEXAS	2017	August	Tropical Storm	GALVESTON
9	119753	723474	TEXAS	2017	August	Tropical Storm	SAN JACINTO
10	120636	722628	NORTH CA	2017	September	Harvey	HARNETT
11	120636	722631	NORTH CA	2017	September	Harvey	MOORE
12	120636	722632	NORTH CA	2017	September	Harvey	HARNETT
13	120636	722634	NORTH CA	2017	September	Harvey	JOHNSTON
14	120636	722637	NORTH CA	2017	September	Harvey	HOKE
15	120636	722638	NORTH CA	2017	September	Harvey	WAKE
16	120636	722639	NORTH CA	2017	September	Harvey	FRANKLIN
17	119753	723475	TEXAS	2017	August	Tropical Storm	WALKER
18	119753	723648	TEXAS	2017	August	Tropical Storm	POLK
19	119821	718430	KENTUCKY	2017	September	Harvey	TODD
20	118746	713318	MISSISSI	2017	August	Harvey	LAMAR
21	118746	713322	MISSISSI	2017	August	Strong Wind	GRENADA
22	119746	719493	TEXAS	2017	August	Harvey	HARDIN
23	119746	719496	TEXAS	2017	August	Harvey	JASPER
24	119746	719497	TEXAS	2017	August	Harvey	NEWTON
25	120636	722624	NORTH CA	2017	September	Harvey	RANDOLPH
26	120464	723037	NORTH CA	2017	September	Harvey	MECKLENBUR
27	120464	723039	NORTH CA	2017	September	Heavy Rain	IREDELL
28	117836	708282	TEXAS	2017	August	Harvey	BRISCOE
29	118746	713323	MISSISSI	2017	August	Harvey	LAMAR
30	118746	713328	MISSISSI	2017	August	Harvey	LOWNDES
31	118746	713321	MISSISSI	2017	August	Strong Wind	ATTALA
				1	1		

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
32	118746	713326	MISSISSI	2017	August	Harvey	LOWNDES
33	118746	713327	MISSISSI	2017	August	Harvey	LOWNDES
34	119746	719740	TEXAS	2017	August	Harvey	JASPER
35	120145	719894	TENNESSEE	2017	August	Harvey	DAVIDSON
36	120636	722621	NORTH CA	2017	September	Harvey	MOORE
37	120636	722618	NORTH CA	2017	September	Harvey	HARNETT
38	119853	718515	TEXAS	2017	August	Harvey	ECTOR
39	118099	709783	KENTUCKY	2017	August	Harvey	PENDLETON
40	120145	719849	TENNESSEE	2017	August	Harvey	PERRY
41	120145	719850	TENNESSEE	2017	August	Harvey	MAURY
42	120145	719851	TENNESSEE	2017	August	Harvey	DAVIDSON
43	119746	719342	TEXAS	2017	August	Harvey	JEFFERSON
44	120145	719854	TENNESSEE	2017	August	Harvey	DAVIDSON
45	120145	719856	TENNESSEE	2017	August	Harvey	DAVIDSON
46	117997	709332	KENTUCKY	2017	August	Harvey	FAYETTE
47	117997	709333	KENTUCKY	2017	August	Harvey	FAYETTE
48	120636	722616	NORTH CA	2017	September	Harvey	WAKE
49	118032	709521	TEXAS	2017	August	Harvey	LUBBOCK
50	118032	709525	TEXAS	2017	August	Harvey	HOCKLEY
51	120145	719885	TENNESSEE	2017	August	Strong Wind	DAVIDSON
52	120145	719886	TENNESSEE	2017	August	Strong Wind	DICKSON
53	120145	719901	TENNESSEE	2017	August	Strong Wind	SUMNER
54	119527	717282	NORTH CA	2017	August	Harvey	WAKE
55	120120	719742	LOUISIANA	2017	August	Harvey	CAMERON
56	120120	719749	LOUISIANA	2017	August	Harvey	CALCASIEU
57	118746	713316	MISSISSI	2017	August	Harvey	JEFFERSON
58	118746	713315	MISSISSI	2017	August	Harvey	FORREST
59	118397	711489	KENTUCKY	2017	September	Harvey	HART
60	118745	713312	MISSISSI	2017	August	Harvey	MARION
61	118749	713324	ARKANSAS	2017	August	Strong Wind	ASHLEY
62	119527	717284	NORTH CA	2017	August	Harvey	JOHNSTON
63	119527	717285	NORTH CA	2017	August	Harvey	JOHNSTON
64	119527	717286	NORTH CA	2017	August	Harvey	JOHNSTON
65	119527	717287	NORTH CA	2017	August	Harvey	JOHNSTON

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
66	119527	717288	NORTH CA	2017	August	Harvey	SAMPSON
67	120120	719755	LOUISIANA	2017	August	Harvey	BEAUREGARD
68	118397	711491	KENTUCKY	2017	September	Harvey	BARREN
69	118397	711492	KENTUCKY	2017	September	Harvey	LOGAN
70	118397	711494	KENTUCKY	2017	September	Harvey	LOGAN
71	118749	713325	ARKANSAS	2017	August	Harvey	CHICOT
72	120257	720575	NORTH CA	2017	August	Harvey	FRANKLIN
73	120192	720189	NORTH CA	2017	August	Harvey	WILKES
74	120192	720190	NORTH CA	2017	August	Lightning	WILKES
75	120120	720001	LOUISIANA	2017	August	Harvey	CAMERON
76	120120	720002	LOUISIANA	2017	August	Harvey	VERMILION
77	120192	720192	NORTH CA	2017	August	Harvey	WILKES
78	120192	720194	NORTH CA	2017	August	Harvey	WILKES
79	118397	711490	KENTUCKY	2017	September	Harvey	BARREN
80	120192	720191	NORTH CA	2017	August	Lightning	WILKES
81	120120	720006	LOUISIANA	2017	August	Harvey	ACADIA
82	120253	720513	NORTH CA	2017	August	Harvey	ROBESON
83	120253	720517	NORTH CA	2017	August	Harvey	COLUMBUS
84	120460	721707	TENNESSEE	2017	September	Strong Wind	HUMPHREYS
85	120460	721708	TENNESSEE	2017	September	Strong Wind	HOUSTON
86	120120	720007	LOUISIANA	2017	August	Harvey	CAMERON
87	120460	721709	TENNESSEE	2017	September	Strong Wind	STEWART
88	120460	721710	TENNESSEE	2017	September	Strong Wind	MONTGOMERY
89	120460	721713	TENNESSEE	2017	September	Harvey	CHEATHAM
90	120460	721712	TENNESSEE	2017	September	Harvey	DAVIDSON
91	120460	721714	TENNESSEE	2017	September	Harvey	SUMNER
92	119874	718584	ARKANSAS	2017	August	Harvey	WASHINGTON
93	119874	718585	ARKANSAS	2017	August	Harvey	WASHINGTON
94	119874	718588	ARKANSAS	2017	August	Harvey	WASHINGTON
95	119874	718589	ARKANSAS	2017	August	Harvey	WASHINGTON
96	119874	718590	ARKANSAS	2017	August	Harvey	WASHINGTON
97	120460	721715	TENNESSEE	2017	September	Harvey	MONTGOMERY
98	119746	719489	TEXAS	2017	August	Harvey	ORANGE
99	119746	719494	TEXAS	2017	August	Harvey	TYLER

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
100	119874	718593	ARKANSAS	2017	August	Harvey	WASHINGTON
						*	

```
Hharvey = Hharvey(Hharvey.Event_Type == 'Harvey',:);
Hharvey = sortrows(Hharvey, 'Property_Cost', 'descend')
```

Hharvey = 139×24 table

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	119753	720871	TEXAS	2017	August	Harvey	GALVESTON
2	119753	720861	TEXAS	2017	August	Harvey	HARRIS
3	119753	720852	TEXAS	2017	August	Harvey	FORT BEND
4	119753	728349	TEXAS	2017	August	Harvey	MONTGOMERY
5	119746	719342	TEXAS	2017	August	Harvey	JEFFERSON
6	119753	720865	TEXAS	2017	August	Harvey	BRAZORIA
7	119746	719489	TEXAS	2017	August	Harvey	ORANGE
8	119746	719493	TEXAS	2017	August	Harvey	HARDIN
9	119753	728395	TEXAS	2017	August	Harvey	WALKER
10	119753	728390	TEXAS	2017	August	Harvey	SAN JACINTO
11	119753	720805	TEXAS	2017	August	Harvey	POLK
12	119746	719496	TEXAS	2017	August	Harvey	JASPER
13	120120	719749	LOUISIANA	2017	August	Harvey	CALCASIEU
14	119746	719494	TEXAS	2017	August	Harvey	TYLER
15	120216	798846	TEXAS	2017	August	Harvey	FAYETTE
16	119746	719497	TEXAS	2017	August	Harvey	NEWTON
17	119859	721360	TEXAS	2017	August	Harvey	VICTORIA
18	120120	719755	LOUISIANA	2017	August	Harvey	BEAUREGARD
19	120216	720625	TEXAS	2017	August	Harvey	CALDWELL
20	120636	722616	NORTH CA	2017	September	Harvey	WAKE
21	120214	798842	TEXAS	2017	August	Harvey	DE WITT
22	120636	722618	NORTH CA	2017	September	Harvey	HARNETT
23	119753	720704	TEXAS	2017	August	Harvey	FORT BEND
24	120216	798845	TEXAS	2017	August	Harvey	BASTROP
25	119859	721361	TEXAS	2017	August	Harvey	CALHOUN
26	119753	767338	TEXAS	2017	August	Harvey	FORT BEND
			1	1	1		

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
27	119753	720473	TEXAS	2017	August	Harvey	FORT BEND
28	119753	720471	TEXAS	2017	August	Harvey	FORT BEND
29	119753	767027	TEXAS	2017	August	Harvey	BRAZORIA
30	119753	720676	TEXAS	2017	August	Harvey	WALLER
31	119753	720477	TEXAS	2017	August	Harvey	FORT BEND
32	119753	720680	TEXAS	2017	August	Harvey	HARRIS
33	119753	720461	TEXAS	2017	August	Harvey	MATAGORDA
34	119821	718430	KENTUCKY	2017	September	Harvey	TODD
35	119753	720707	TEXAS	2017	August	Harvey	WHARTON
36	120216	798844	TEXAS	2017	August	Harvey	LEE
37	118746	713315	MISSISSI	2017	August	Harvey	FORREST
38	120120	720006	LOUISIANA	2017	August	Harvey	ACADIA
39	120460	721712	TENNESSEE	2017	September	Harvey	DAVIDSON
40	119753	720677	TEXAS	2017	August	Harvey	WALLER
41	119753	720709	TEXAS	2017	August	Harvey	GALVESTON
42	118746	713314	MISSISSI	2017	August	Harvey	LAMAR
43	119833	718633	MISSISSI	2017	August	Harvey	ITAWAMBA
44	119527	717287	NORTH CA	2017	August	Harvey	JOHNSTON
45	120216	798843	TEXAS	2017	August	Harvey	HAYS
46	119753	721321	TEXAS	2017	August	Harvey	JACKSON
47	119753	721322	TEXAS	2017	August	Harvey	JACKSON
48	119753	728921	TEXAS	2017	August	Harvey	AUSTIN
49	119753	720674	TEXAS	2017	August	Harvey	HARRIS
50	119753	720466	TEXAS	2017	August	Harvey	BRAZORIA
51	119753	720463	TEXAS	2017	August	Harvey	BRAZORIA
52	120636	722627	NORTH CA	2017	September	Harvey	LEE
53	120120	719742	LOUISIANA	2017	August	Harvey	CAMERON
54	119833	718634	MISSISSI	2017	August	Harvey	PRENTISS
55	119753	720706	TEXAS	2017	August	Harvey	HARRIS
56	119753	720699	TEXAS	2017	August	Harvey	WHARTON
57	119753	720470	TEXAS	2017	August	Harvey	BRAZORIA
58	119753	720710	TEXAS	2017	August	Harvey	HARRIS
59	118032	709525	TEXAS	2017	August	Harvey	HOCKLEY
60	117997	709332	KENTUCKY	2017	August	Harvey	FAYETTE

	EpisodelD	Event_ID	State	Year	Month	Event_Type	CZ_Name
61	119753	720460	TEXAS	2017	August	Harvey	BRAZORIA
62	119753	720672	TEXAS	2017	August	Harvey	FORT BEND
63	119753	720686	TEXAS	2017	August	Harvey	HARRIS
64	120636	722637	NORTH CA	2017	September	Harvey	HOKE
65	120145	719894	TENNESSEE	2017	August	Harvey	DAVIDSON
66	120145	719854	TENNESSEE	2017	August	Harvey	DAVIDSON
67	119527	717286	NORTH CA	2017	August	Harvey	JOHNSTON
68	119832	718464	TENNESSEE	2017	August	Harvey	BENTON
69	119833	718635	MISSISSI	2017	August	Harvey	BENTON
70	119833	718459	MISSISSI	2017	August	Harvey	TUNICA
71	119527	717284	NORTH CA	2017	August	Harvey	JOHNSTON
72	120460	721715	TENNESSEE	2017	September	Harvey	MONTGOMERY
73	119874	718593	ARKANSAS	2017	August	Harvey	WASHINGTON
74	118538	712147	TENNESSEE	2017	August	Harvey	GIBSON
75	120636	722623	NORTH CA	2017	September	Harvey	WAYNE
76	120145	719856	TENNESSEE	2017	August	Harvey	DAVIDSON
77	118746	713316	MISSISSI	2017	August	Harvey	JEFFERSON
78	120120	720007	LOUISIANA	2017	August	Harvey	CAMERON
79	119827	718621	ARKANSAS	2017	August	Harvey	PHILLIPS
80	118746	713318	MISSISSI	2017	August	Harvey	LAMAR
81	117836	708282	TEXAS	2017	August	Harvey	BRISCOE
82	120145	719849	TENNESSEE	2017	August	Harvey	PERRY
83	120145	719850	TENNESSEE	2017	August	Harvey	MAURY
84	119527	717282	NORTH CA	2017	August	Harvey	WAKE
85	118397	711489	KENTUCKY	2017	September	Harvey	HART
86	119527	717285	NORTH CA	2017	August	Harvey	JOHNSTON
87	118397	711491	KENTUCKY	2017	September	Harvey	BARREN
88	118397	711492	KENTUCKY	2017	September	Harvey	LOGAN
89	118397	711494	KENTUCKY	2017	September	Harvey	LOGAN
90	118397	711490	KENTUCKY	2017	September	Harvey	BARREN
91	120460	721713	TENNESSEE	2017	September	Harvey	CHEATHAM
92	120460	721714	TENNESSEE	2017	September	Harvey	SUMNER
93	119874	718590	ARKANSAS	2017	August	Harvey	WASHINGTON
94	119832	718738	TENNESSEE	2017	August	Harvey	HARDIN

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
95	119832	718739	TENNESSEE	2017	August	Harvey	HARDIN
96	119859	721358	TEXAS	2017	August	Harvey	CALHOUN
97	120636	722626	NORTH CA	2017	September	Harvey	LEE
98	120636	722628	NORTH CA	2017	September	Harvey	HARNETT
99	119853	718515	TEXAS	2017	August	Harvey	ECTOR
100	118745	713312	MISSISSI	2017	August	Harvey	MARION

Two States Most Impacted by Harvey

Clearly state the two states in order

Two_States = groupsummary(Hharvey, "State", "mean", "Property_Cost")

Two_States = 7×3 table

	State	GroupCount	mean_Property_Cost
1	ARKANSAS	8	7000
2	KENTUCKY	9	4.8333e+04
3	LOUISIANA	7	1.0754e+07
4	MISSISSI	13	4.9846e+04
5	NORTH CA	28	4.4043e+05
6	TENNESSEE	19	2.0895e+04
7	TEXAS	55	7.9339e+08

1.TEXAS

2.LOUISIANA

Table of Events for Two Most Impacted States

Create and display a few rows of events that include only the two most affected states

```
Hharvey = Hharvey(Hharvey.Event_Type == 'Harvey',:);
Hharvey = sortrows(Hharvey, 'Property_Cost', 'descend')
```

Hharvey = 139×24 table

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	119753	720871	TEXAS	2017	August	Harvey	GALVESTON
2	119753	720861	TEXAS	2017	August	Harvey	HARRIS
3	119753	720852	TEXAS	2017	August	Harvey	FORT BEND
4	119753	728349	TEXAS	2017	August	Harvey	MONTGOMERY

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
5	119746	719342	TEXAS	2017	August	Harvey	JEFFERSON
6	119753	720865	TEXAS	2017	August	Harvey	BRAZORIA
7	119746	719489	TEXAS	2017	August	Harvey	ORANGE
8	119746	719493	TEXAS	2017	August	Harvey	HARDIN
9	119753	728395	TEXAS	2017	August	Harvey	WALKER
10	119753	728390	TEXAS	2017	August	Harvey	SAN JACINTO
11	119753	720805	TEXAS	2017	August	Harvey	POLK
12	119746	719496	TEXAS	2017	August	Harvey	JASPER
13	120120	719749	LOUISIANA	2017	August	Harvey	CALCASIEU
14	119746	719494	TEXAS	2017	August	Harvey	TYLER
15	120216	798846	TEXAS	2017	August	Harvey	FAYETTE
16	119746	719497	TEXAS	2017	August	Harvey	NEWTON
17	119859	721360	TEXAS	2017	August	Harvey	VICTORIA
18	120120	719755	LOUISIANA	2017	August	Harvey	BEAUREGARD
19	120216	720625	TEXAS	2017	August	Harvey	CALDWELL
20	120636	722616	NORTH CA	2017	September	Harvey	WAKE
21	120214	798842	TEXAS	2017	August	Harvey	DE WITT
22	120636	722618	NORTH CA	2017	September	Harvey	HARNETT
23	119753	720704	TEXAS	2017	August	Harvey	FORT BEND
24	120216	798845	TEXAS	2017	August	Harvey	BASTROP
25	119859	721361	TEXAS	2017	August	Harvey	CALHOUN
26	119753	767338	TEXAS	2017	August	Harvey	FORT BEND
27	119753	720473	TEXAS	2017	August	Harvey	FORT BEND
28	119753	720471	TEXAS	2017	August	Harvey	FORT BEND
29	119753	767027	TEXAS	2017	August	Harvey	BRAZORIA
30	119753	720676	TEXAS	2017	August	Harvey	WALLER
31	119753	720477	TEXAS	2017	August	Harvey	FORT BEND
32	119753	720680	TEXAS	2017	August	Harvey	HARRIS
33	119753	720461	TEXAS	2017	August	Harvey	MATAGORDA
34	119821	718430	KENTUCKY	2017	September	Harvey	TODD
35	119753	720707	TEXAS	2017	August	Harvey	WHARTON
36	120216	798844	TEXAS	2017	August	Harvey	LEE
37	118746	713315	MISSISSI	2017	August	Harvey	FORREST
38	120120	720006	LOUISIANA	2017	August	Harvey	ACADIA

	EpisodelD	Event_ID	State	Year	Month	Event_Type	CZ_Name
39	120460	721712	TENNESSEE	2017	September	Harvey	DAVIDSON
40	119753	720677	TEXAS	2017	August	Harvey	WALLER
41	119753	720709	TEXAS	2017	August	Harvey	GALVESTON
42	118746	713314	MISSISSI	2017	August	Harvey	LAMAR
43	119833	718633	MISSISSI	2017	August	Harvey	ITAWAMBA
44	119527	717287	NORTH CA	2017	August	Harvey	JOHNSTON
45	120216	798843	TEXAS	2017	August	Harvey	HAYS
46	119753	721321	TEXAS	2017	August	Harvey	JACKSON
47	119753	721322	TEXAS	2017	August	Harvey	JACKSON
48	119753	728921	TEXAS	2017	August	Harvey	AUSTIN
49	119753	720674	TEXAS	2017	August	Harvey	HARRIS
50	119753	720466	TEXAS	2017	August	Harvey	BRAZORIA
51	119753	720463	TEXAS	2017	August	Harvey	BRAZORIA
52	120636	722627	NORTH CA	2017	September	Harvey	LEE
53	120120	719742	LOUISIANA	2017	August	Harvey	CAMERON
54	119833	718634	MISSISSI	2017	August	Harvey	PRENTISS
55	119753	720706	TEXAS	2017	August	Harvey	HARRIS
56	119753	720699	TEXAS	2017	August	Harvey	WHARTON
57	119753	720470	TEXAS	2017	August	Harvey	BRAZORIA
58	119753	720710	TEXAS	2017	August	Harvey	HARRIS
59	118032	709525	TEXAS	2017	August	Harvey	HOCKLEY
60	117997	709332	KENTUCKY	2017	August	Harvey	FAYETTE
61	119753	720460	TEXAS	2017	August	Harvey	BRAZORIA
62	119753	720672	TEXAS	2017	August	Harvey	FORT BEND
63	119753	720686	TEXAS	2017	August	Harvey	HARRIS
64	120636	722637	NORTH CA	2017	September	Harvey	HOKE
65	120145	719894	TENNESSEE	2017	August	Harvey	DAVIDSON
66	120145	719854	TENNESSEE	2017	August	Harvey	DAVIDSON
67	119527	717286	NORTH CA	2017	August	Harvey	JOHNSTON
68	119832	718464	TENNESSEE	2017	August	Harvey	BENTON
69	119833	718635	MISSISSI	2017	August	Harvey	BENTON
70	119833	718459	MISSISSI	2017	August	Harvey	TUNICA
71	119527	717284	NORTH CA	2017	August	Harvey	JOHNSTON
72	120460	721715	TENNESSEE	2017	September	Harvey	MONTGOMERY

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
73	119874	718593	ARKANSAS	2017	August	Harvey	WASHINGTON
74	118538	712147	TENNESSEE	2017	August	Harvey	GIBSON
75	120636	722623	NORTH CA	2017	September	Harvey	WAYNE
76	120145	719856	TENNESSEE	2017	August	Harvey	DAVIDSON
77	118746	713316	MISSISSI	2017	August	Harvey	JEFFERSON
78	120120	720007	LOUISIANA	2017	August	Harvey	CAMERON
79	119827	718621	ARKANSAS	2017	August	Harvey	PHILLIPS
80	118746	713318	MISSISSI	2017	August	Harvey	LAMAR
81	117836	708282	TEXAS	2017	August	Harvey	BRISCOE
82	120145	719849	TENNESSEE	2017	August	Harvey	PERRY
83	120145	719850	TENNESSEE	2017	August	Harvey	MAURY
84	119527	717282	NORTH CA	2017	August	Harvey	WAKE
85	118397	711489	KENTUCKY	2017	September	Harvey	HART
86	119527	717285	NORTH CA	2017	August	Harvey	JOHNSTON
87	118397	711491	KENTUCKY	2017	September	Harvey	BARREN
88	118397	711492	KENTUCKY	2017	September	Harvey	LOGAN
89	118397	711494	KENTUCKY	2017	September	Harvey	LOGAN
90	118397	711490	KENTUCKY	2017	September	Harvey	BARREN
91	120460	721713	TENNESSEE	2017	September	Harvey	CHEATHAM
92	120460	721714	TENNESSEE	2017	September	Harvey	SUMNER
93	119874	718590	ARKANSAS	2017	August	Harvey	WASHINGTON
94	119832	718738	TENNESSEE	2017	August	Harvey	HARDIN
95	119832	718739	TENNESSEE	2017	August	Harvey	HARDIN
96	119859	721358	TEXAS	2017	August	Harvey	CALHOUN
97	120636	722626	NORTH CA	2017	September	Harvey	LEE
98	120636	722628	NORTH CA	2017	September	Harvey	HARNETT
99	119853	718515	TEXAS	2017	August	Harvey	ECTOR
100	118745	713312	MISSISSI	2017	August	Harvey	MARION

Hharvey = Hharvey(ismember(Hharvey.State,{'LOUISIANA','TEXAS'}),:)

Hharvey = 62×24 table

. . .

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	119753	720871	TEXAS	2017	August	Harvey	GALVESTON
2	119753	720861	TEXAS	2017	August	Harvey	HARRIS
3	119753	720852	TEXAS	2017	August	Harvey	FORT BEND
4	119753	728349	TEXAS	2017	August	Harvey	MONTGOMERY
5	119746	719342	TEXAS	2017	August	Harvey	JEFFERSON
6	119753	720865	TEXAS	2017	August	Harvey	BRAZORIA
7	119746	719489	TEXAS	2017	August	Harvey	ORANGE
8	119746	719493	TEXAS	2017	August	Harvey	HARDIN
9	119753	728395	TEXAS	2017	August	Harvey	WALKER
10	119753	728390	TEXAS	2017	August	Harvey	SAN JACINTO
11	119753	720805	TEXAS	2017	August	Harvey	POLK
12	119746	719496	TEXAS	2017	August	Harvey	JASPER
13	120120	719749	LOUISIANA	2017	August	Harvey	CALCASIEU
14	119746	719494	TEXAS	2017	August	Harvey	TYLER
15	120216	798846	TEXAS	2017	August	Harvey	FAYETTE
16	119746	719497	TEXAS	2017	August	Harvey	NEWTON
17	119859	721360	TEXAS	2017	August	Harvey	VICTORIA
18	120120	719755	LOUISIANA	2017	August	Harvey	BEAUREGARD
19	120216	720625	TEXAS	2017	August	Harvey	CALDWELL
20	120214	798842	TEXAS	2017	August	Harvey	DE WITT
21	119753	720704	TEXAS	2017	August	Harvey	FORT BEND
22	120216	798845	TEXAS	2017	August	Harvey	BASTROP
23	119859	721361	TEXAS	2017	August	Harvey	CALHOUN
24	119753	767338	TEXAS	2017	August	Harvey	FORT BEND
25	119753	720473	TEXAS	2017	August	Harvey	FORT BEND
26	119753	720471	TEXAS	2017	August	Harvey	FORT BEND
27	119753	767027	TEXAS	2017	August	Harvey	BRAZORIA
28	119753	720676	TEXAS	2017	August	Harvey	WALLER
29	119753	720477	TEXAS	2017	August	Harvey	FORT BEND
30	119753	720680	TEXAS	2017	August	Harvey	HARRIS
31	119753	720461	TEXAS	2017	August	Harvey	MATAGORDA
32	119753	720707	TEXAS	2017	August	Harvey	WHARTON
33	120216	798844	TEXAS	2017	August	Harvey	LEE
34	120120	720006	LOUISIANA	2017	August	Harvey	ACADIA

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
35	119753	720677	TEXAS	2017	August	Harvey	WALLER
36	119753	720709	TEXAS	2017	August	Harvey	GALVESTON
37	120216	798843	TEXAS	2017	August	Harvey	HAYS
38	119753	721321	TEXAS	2017	August	Harvey	JACKSON
39	119753	721322	TEXAS	2017	August	Harvey	JACKSON
40	119753	728921	TEXAS	2017	August	Harvey	AUSTIN
41	119753	720674	TEXAS	2017	August	Harvey	HARRIS
42	119753	720466	TEXAS	2017	August	Harvey	BRAZORIA
43	119753	720463	TEXAS	2017	August	Harvey	BRAZORIA
44	120120	719742	LOUISIANA	2017	August	Harvey	CAMERON
45	119753	720706	TEXAS	2017	August	Harvey	HARRIS
46	119753	720699	TEXAS	2017	August	Harvey	WHARTON
47	119753	720470	TEXAS	2017	August	Harvey	BRAZORIA
48	119753	720710	TEXAS	2017	August	Harvey	HARRIS
49	118032	709525	TEXAS	2017	August	Harvey	HOCKLEY
50	119753	720460	TEXAS	2017	August	Harvey	BRAZORIA
51	119753	720672	TEXAS	2017	August	Harvey	FORT BEND
52	119753	720686	TEXAS	2017	August	Harvey	HARRIS
53	120120	720007	LOUISIANA	2017	August	Harvey	CAMERON
54	117836	708282	TEXAS	2017	August	Harvey	BRISCOE
55	119859	721358	TEXAS	2017	August	Harvey	CALHOUN
56	119853	718515	TEXAS	2017	August	Harvey	ECTOR
57	120120	720001	LOUISIANA	2017	August	Harvey	CAMERON
58	119746	719740	TEXAS	2017	August	Harvey	JASPER
59	120120	720002	LOUISIANA	2017	August	Harvey	VERMILION
60	119753	721133	TEXAS	2017	August	Harvey	GALVESTON
61	118032	709521	TEXAS	2017	August	Harvey	LUBBOCK
62	119753	720459	TEXAS	2017	August	Harvey	GALVESTON

Section 2: Visualizations

Figure of Event Types

Create a figure showing the type and number of occurances for events related to Harvey in the two states

```
filename = "StormEvents_2017_finalProject.csv";
Hharvey = importfile1(filename);
Hharvey = Hharvey(Hharvey.Begin_Date_Time >= '2017-08-17 00:00:00' & Hharvey.Begin_Date_Time <
    Hharvey = Hharvey(Hharvey.End_Date_Time >= '2017-08-17 00:00:00' & Hharvey.End_Date_Time < '2011
    Hharvey = Hharvey(Hharvey.Property_Cost >= 1,:);
Hharvey = Hharvey(ismember(Hharvey.State,{'ARKANSAS','KENTUCKY','LOUISIANA','MISSISSIPPI','NORTHHARVEY = Sortrows(Hharvey,'Property_Cost','descend');
Hharvey = Hharvey(ismember(Hharvey.State,{'LOUISIANA','TEXAS'}),:);
Hharvey.Event_Type = removecats(Hharvey.Event_Type,{'Astronomical Low Tide','Avalanche','Blizza Hharvey.Event_Type = removecats(Hharvey.Event_Type,{'Tropical Storm','Storm Surge/Tide'})
```

. . .

Hharvey = 102×24 table

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	119753	723449	TEXAS	2017	August	<undefined></undefined>	GALVESTON
2	119753	720871	TEXAS	2017	August	Flash Flood	GALVESTON
3	119753	720861	TEXAS	2017	August	Flash Flood	HARRIS
4	119753	723473	TEXAS	2017	August	<undefined></undefined>	FORT BEND
5	119753	720852	TEXAS	2017	August	Flash Flood	FORT BEND
6	119753	723472	TEXAS	2017	August	<undefined></undefined>	MONTGOMERY
7	119753	728349	TEXAS	2017	August	Flash Flood	MONTGOMERY
8	119746	719342	TEXAS	2017	August	Flash Flood	JEFFERSON
9	119753	720865	TEXAS	2017	August	Flash Flood	BRAZORIA
10	119859	718519	TEXAS	2017	August	Hurricane	ARANSAS
11	119746	719489	TEXAS	2017	August	Flash Flood	ORANGE
12	119859	720925	TEXAS	2017	August	Hurricane	NUECES
13	119753	723658	TEXAS	2017	August	<undefined></undefined>	LIBERTY
14	119753	723475	TEXAS	2017	August	<undefined></undefined>	WALKER
15	119746	719493	TEXAS	2017	August	Flash Flood	HARDIN
16	119753	728395	TEXAS	2017	August	Flash Flood	WALKER
17	119859	720923	TEXAS	2017	August	Hurricane	SAN PATRI
18	119859	720951	TEXAS	2017	August	Hurricane	REFUGIO
19	119753	723646	TEXAS	2017	August	<undefined></undefined>	MATAGORDA
20	119753	723647	TEXAS	2017	August	<undefined></undefined>	JACKSON
21	119753	723474	TEXAS	2017	August	<undefined></undefined>	SAN JACINTO
22	119753	728390	TEXAS	2017	August	Flash Flood	SAN JACINTO

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
23	119753	723657	TEXAS	2017	August	<undefined></undefined>	WALLER
24	119753	723648	TEXAS	2017	August	<undefined></undefined>	POLK
25	119753	720805	TEXAS	2017	August	Flash Flood	POLK
26	119859	720926	TEXAS	2017	August	<undefined></undefined>	NUECES
27	119859	720927	TEXAS	2017	August	Hurricane	CALHOUN
28	119753	723656	TEXAS	2017	August	<undefined></undefined>	WHARTON
29	119859	718740	TEXAS	2017	August	<undefined></undefined>	ARANSAS
30	119753	723654	TEXAS	2017	August	<undefined></undefined>	WASHINGTON
31	119859	721006	TEXAS	2017	August	Hurricane	VICTORIA
32	119746	719496	TEXAS	2017	August	Flash Flood	JASPER
33	119753	723655	TEXAS	2017	August	<undefined></undefined>	MADISON
34	120120	719749	LOUISIANA	2017	August	Flash Flood	CALCASIEU
35	119746	719494	TEXAS	2017	August	Flash Flood	TYLER
36	120216	798846	TEXAS	2017	August	Flood	FAYETTE
37	119753	723653	TEXAS	2017	August	<undefined></undefined>	GRIMES
38	119746	719497	TEXAS	2017	August	Flash Flood	NEWTON
39	119859	720932	TEXAS	2017	August	<undefined></undefined>	CALHOUN
40	119859	721360	TEXAS	2017	August	Flood	VICTORIA
41	119753	723651	TEXAS	2017	August	<undefined></undefined>	BURLESON
42	120120	719755	LOUISIANA	2017	August	Flash Flood	BEAUREGARD
43	119753	723650	TEXAS	2017	August	<undefined></undefined>	BRAZOS
44	120216	720625	TEXAS	2017	August	Flood	CALDWELL
45	120214	798842	TEXAS	2017	August	Flood	DE WITT
46	119859	720924	TEXAS	2017	August	<undefined></undefined>	SAN PATRI
47	119753	720704	TEXAS	2017	August	Tornado	FORT BEND
48	120216	798845	TEXAS	2017	August	Flood	BASTROP
49	119859	721361	TEXAS	2017	August	Flood	CALHOUN
50	119859	721002	TEXAS	2017	August	Hurricane	GOLIAD
51	119753	723659	TEXAS	2017	August	<undefined></undefined>	CHAMBERS
52	120216	720277	TEXAS	2017	August	<undefined></undefined>	COMAL
53	119753	767338	TEXAS	2017	August	Tornado	FORT BEND
54	119753	720473	TEXAS	2017	August	Tornado	FORT BEND
55	119753	720471	TEXAS	2017	August	Tornado	FORT BEND
56	119753	767027	TEXAS	2017	August	Tornado	BRAZORIA

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
57	119753	720676	TEXAS	2017	August	Tornado	WALLER
58	119753	720477	TEXAS	2017	August	Tornado	FORT BEND
59	119753	720680	TEXAS	2017	August	Tornado	HARRIS
60	119753	720461	TEXAS	2017	August	Tornado	MATAGORDA
61	119753	720707	TEXAS	2017	August	Tornado	WHARTON
62	120216	798844	TEXAS	2017	August	Flood	LEE
63	120120	720006	LOUISIANA	2017	August	Tornado	ACADIA
64	119753	720677	TEXAS	2017	August	Tornado	WALLER
65	119753	720709	TEXAS	2017	August	Tornado	GALVESTON
66	120216	798843	TEXAS	2017	August	Flood	HAYS
67	119753	721321	TEXAS	2017	August	Flash Flood	JACKSON
68	119753	721322	TEXAS	2017	August	Flash Flood	JACKSON
69	119753	728921	TEXAS	2017	August	Flash Flood	AUSTIN
70	120216	720275	TEXAS	2017	August	<undefined></undefined>	BEXAR
71	120216	720283	TEXAS	2017	August	<undefined></undefined>	LAVACA
72	120216	720284	TEXAS	2017	August	<undefined></undefined>	LEE
73	120214	720264	TEXAS	2017	August	Hurricane	DE WITT
74	120216	720279	TEXAS	2017	August	<undefined></undefined>	GONZALES
75	119753	720674	TEXAS	2017	August	Tornado	HARRIS
76	119753	720466	TEXAS	2017	August	Tornado	BRAZORIA
77	119753	720463	TEXAS	2017	August	Tornado	BRAZORIA
78	120120	719742	LOUISIANA	2017	August	Flood	CAMERON
79	120216	720280	TEXAS	2017	August	<undefined></undefined>	GUADALUPE
80	119753	720706	TEXAS	2017	August	Tornado	HARRIS
81	119753	720699	TEXAS	2017	August	Tornado	WHARTON
82	119753	720470	TEXAS	2017	August	Tornado	BRAZORIA
83	119753	720710	TEXAS	2017	August	Tornado	HARRIS
84	118032	709525	TEXAS	2017	August	Thunderstorm Wind	HOCKLEY
85	119753	720460	TEXAS	2017	August	Tornado	BRAZORIA
86	119753	720672	TEXAS	2017	August	Tornado	FORT BEND
87	119753	720686	TEXAS	2017	August	Tornado	HARRIS
88	119859	720983	TEXAS	2017	August	<undefined></undefined>	REFUGIO
89	120120	720007	LOUISIANA	2017	August	Tornado	CAMERON
90	117836	708282	TEXAS	2017	August	Thunderstorm Wind	BRISCOE

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
91	119859	721355	TEXAS	2017	August	<undefined></undefined>	KLEBERG
92	119859	721357	TEXAS	2017	August	<undefined></undefined>	LIVE OAK
93	119859	721358	TEXAS	2017	August	Tornado	CALHOUN
94	119859	721354	TEXAS	2017	August	Hurricane	BEE
95	119853	718515	TEXAS	2017	August	Thunderstorm Wind	ECTOR
96	120120	720001	LOUISIANA	2017	August	Tornado	CAMERON
97	119746	719740	TEXAS	2017	August	Thunderstorm Wind	JASPER
98	120120	720002	LOUISIANA	2017	August	Tornado	VERMILION
99	119753	721133	TEXAS	2017	August	Flash Flood	GALVESTON
100	119859	721356	TEXAS	2017	August	<undefined></undefined>	JIM WELLS

histogram(Hharvey.Event_Type)

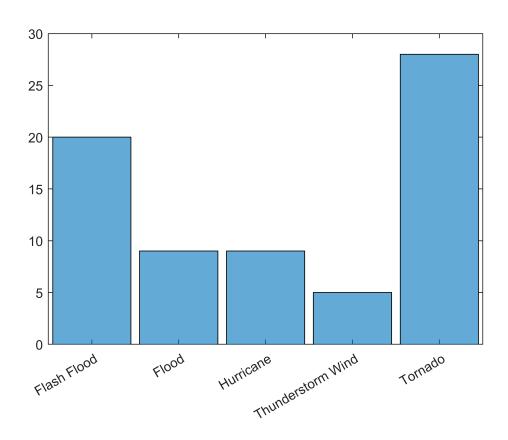
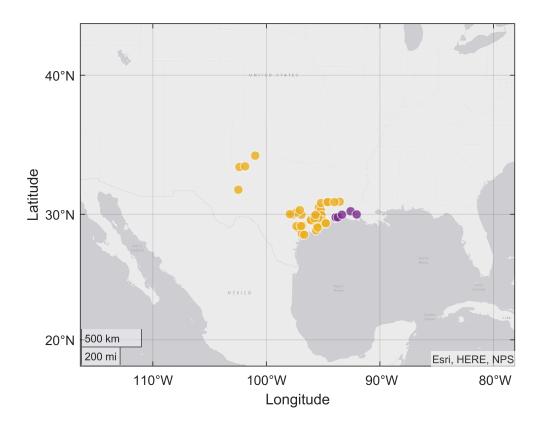


Figure of Event Locations

Show the location of events in the two states. Be sure to use different markers for the two states

```
geo = geobubble(Hharvey, "Begin_Lat", "Begin_Lon", "ColorVariable", "State")
```

```
geolimits([17.8 43.4],[-116.3 -78.2])
```



Section 3: Analysis

Three Counties with Most Events in State 1

Either type out, show in a table, or show in a clear visualization the three counties with the most events in state 1.

```
filename = "StormEvents_2017_finalProject.csv";
Hharvey = importfile1(filename);
Hharvey = Hharvey(Hharvey.Begin_Date_Time >= '2017-08-17 00:00:00' & Hharvey.Begin_Date_Time <</pre>
```

```
Hharvey = Hharvey(Hharvey.End_Date_Time >= '2017-08-17 00:00:00' & Hharvey.End_Date_Time < '2024
Hharvey = Hharvey(Hharvey.Property_Cost >= 1,:);
Hharvey = Hharvey(ismember(Hharvey.State,{'ARKANSAS','KENTUCKY','LOUISIANA','MISSISSIPPI','NORTHHARVEY = sortrows(Hharvey,'Property_Cost','descend');
Hharvey = Hharvey(ismember(Hharvey.State,{'LOUISIANA','TEXAS'}),:);
Hharvey = Hharvey(Hharvey.State == 'TEXAS',:);
Hharvey.Event_Type = removecats(Hharvey.Event_Type,{'Astronomical Low Tide','Avalanche','Blizza
Hharvey.Event_Type = removecats(Hharvey.Event_Type,{'Tropical Storm','Storm Surge/Tide'})
```

Hharvey = 95×24 table

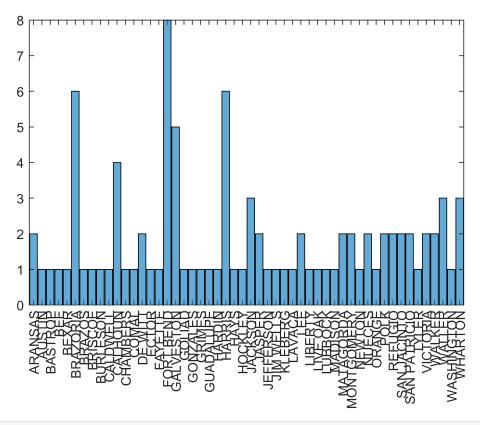
EpisodeID Event_ID State Month CZ_Name Event_Type 1 119753 723449 **TEXAS** 2017 August <undefined> GALVESTON 2 119753 720871 **TEXAS** Flash Flood GALVESTON 2017 August 3 119753 720861 **TEXAS** 2017 August Flash Flood **HARRIS** 4 119753 723473 **TEXAS** <undefined> FORT BEND 2017 August 5 119753 720852 **TEXAS** 2017 August Flash Flood FORT BEND 6 119753 723472 **TEXAS** 2017 August <undefined> MONTGOMERY 7 119753 728349 **TEXAS** 2017 August Flash Flood MONTGOMERY 8 119746 719342 **TEXAS** 2017 August Flash Flood **JEFFERSON** 9 720865 **TEXAS** Flash Flood 119753 2017 August BRAZORIA 10 119859 718519 **TEXAS** 2017 August Hurricane **ARANSAS** 11 119746 719489 **TEXAS** 2017 August Flash Flood ORANGE 12 119859 720925 **TEXAS** 2017 August Hurricane NUECES 13 723658 <undefined> 119753 **TEXAS** 2017 August LIBERTY 14 119753 723475 **TEXAS** <undefined> WALKER 2017 August 15 119746 719493 Flash Flood HARDIN **TEXAS** 2017 August 16 728395 Flash Flood 119753 **TEXAS** 2017 August WALKER 17 119859 720923 **TEXAS** 2017 August Hurricane SAN PATRI... 18 720951 **REFUGIO** 119859 **TEXAS** 2017 August Hurricane 19 723646 <undefined> MATAGORDA 119753 **TEXAS** 2017 August 20 119753 723647 **TEXAS** 2017 August <undefined> **JACKSON** 21 119753 723474 **TEXAS** 2017 August <undefined> SAN JACINTO 22 119753 728390 **TEXAS** 2017 August Flash Flood SAN JACINTO 23 119753 723657 <undefined> WALLER **TEXAS** 2017 August 24 119753 723648 **TEXAS** 2017 August <undefined> POLK 25 119753 720805 **TEXAS** 2017 August Flash Flood POLK 26 119859 720926 **TEXAS** 2017 <undefined> NUECES August 27 119859 720927 **TEXAS** 2017 August CALHOUN Hurricane

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
28	119753	723656	TEXAS	2017	August	<undefined></undefined>	WHARTON
29	119859	718740	TEXAS	2017	August	<undefined></undefined>	ARANSAS
30	119753	723654	TEXAS	2017	August	<undefined></undefined>	WASHINGTON
31	119859	721006	TEXAS	2017	August	Hurricane	VICTORIA
32	119746	719496	TEXAS	2017	August	Flash Flood	JASPER
33	119753	723655	TEXAS	2017	August	<undefined></undefined>	MADISON
34	119746	719494	TEXAS	2017	August	Flash Flood	TYLER
35	120216	798846	TEXAS	2017	August	Flood	FAYETTE
36	119753	723653	TEXAS	2017	August	<undefined></undefined>	GRIMES
37	119746	719497	TEXAS	2017	August	Flash Flood	NEWTON
38	119859	720932	TEXAS	2017	August	<undefined></undefined>	CALHOUN
39	119859	721360	TEXAS	2017	August	Flood	VICTORIA
40	119753	723651	TEXAS	2017	August	<undefined></undefined>	BURLESON
41	119753	723650	TEXAS	2017	August	<undefined></undefined>	BRAZOS
42	120216	720625	TEXAS	2017	August	Flood	CALDWELL
43	120214	798842	TEXAS	2017	August	Flood	DE WITT
44	119859	720924	TEXAS	2017	August	<undefined></undefined>	SAN PATRI
45	119753	720704	TEXAS	2017	August	Tornado	FORT BEND
46	120216	798845	TEXAS	2017	August	Flood	BASTROP
47	119859	721361	TEXAS	2017	August	Flood	CALHOUN
48	119859	721002	TEXAS	2017	August	Hurricane	GOLIAD
49	119753	723659	TEXAS	2017	August	<undefined></undefined>	CHAMBERS
50	120216	720277	TEXAS	2017	August	<undefined></undefined>	COMAL
51	119753	767338	TEXAS	2017	August	Tornado	FORT BEND
52	119753	720473	TEXAS	2017	August	Tornado	FORT BEND
53	119753	720471	TEXAS	2017	August	Tornado	FORT BEND
54	119753	767027	TEXAS	2017	August	Tornado	BRAZORIA
55	119753	720676	TEXAS	2017	August	Tornado	WALLER
56	119753	720477	TEXAS	2017	August	Tornado	FORT BEND
57	119753	720680	TEXAS	2017	August	Tornado	HARRIS
58	119753	720461	TEXAS	2017	August	Tornado	MATAGORDA
59	119753	720707	TEXAS	2017	August	Tornado	WHARTON
60	120216	798844	TEXAS	2017	August	Flood	LEE
61	119753	720677	TEXAS	2017	August	Tornado	WALLER

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
62	119753	720709	TEXAS	2017	August	Tornado	GALVESTON
63	120216	798843	TEXAS	2017	August	Flood	HAYS
64	119753	721321	TEXAS	2017	August	Flash Flood	JACKSON
65	119753	721322	TEXAS	2017	August	Flash Flood	JACKSON
66	119753	728921	TEXAS	2017	August	Flash Flood	AUSTIN
67	120216	720275	TEXAS	2017	August	<undefined></undefined>	BEXAR
68	120216	720283	TEXAS	2017	August	<undefined></undefined>	LAVACA
69	120216	720284	TEXAS	2017	August	<undefined></undefined>	LEE
70	120214	720264	TEXAS	2017	August	Hurricane	DE WITT
71	120216	720279	TEXAS	2017	August	<undefined></undefined>	GONZALES
72	119753	720674	TEXAS	2017	August	Tornado	HARRIS
73	119753	720466	TEXAS	2017	August	Tornado	BRAZORIA
74	119753	720463	TEXAS	2017	August	Tornado	BRAZORIA
75	120216	720280	TEXAS	2017	August	<undefined></undefined>	GUADALUPE
76	119753	720706	TEXAS	2017	August	Tornado	HARRIS
77	119753	720699	TEXAS	2017	August	Tornado	WHARTON
78	119753	720470	TEXAS	2017	August	Tornado	BRAZORIA
79	119753	720710	TEXAS	2017	August	Tornado	HARRIS
80	118032	709525	TEXAS	2017	August	Thunderstorm Wind	HOCKLEY
81	119753	720460	TEXAS	2017	August	Tornado	BRAZORIA
82	119753	720672	TEXAS	2017	August	Tornado	FORT BEND
83	119753	720686	TEXAS	2017	August	Tornado	HARRIS
84	119859	720983	TEXAS	2017	August	<undefined></undefined>	REFUGIO
85	117836	708282	TEXAS	2017	August	Thunderstorm Wind	BRISCOE
86	119859	721355	TEXAS	2017	August	<undefined></undefined>	KLEBERG
87	119859	721357	TEXAS	2017	August	<undefined></undefined>	LIVE OAK
88	119859	721358	TEXAS	2017	August	Tornado	CALHOUN
89	119859	721354	TEXAS	2017	August	Hurricane	BEE
90	119853	718515	TEXAS	2017	August	Thunderstorm Wind	ECTOR
91	119746	719740	TEXAS	2017	August	Thunderstorm Wind	JASPER
92	119753	721133	TEXAS	2017	August	Flash Flood	GALVESTON
93	119859	721356	TEXAS	2017	August	<undefined></undefined>	JIM WELLS
94	118032	709521	TEXAS	2017	August	Thunderstorm Wind	LUBBOCK

		EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
9	5	119753	720459	TEXAS	2017	August	Tornado	GALVESTON

histogram(removecats(Hharvey.CZ_Name))



Counties = groupsummary(Hharvey, "CZ_Name");
Counties = sortrows(Counties, 'GroupCount', 'descend')

Counties = 52×2 table

	CZ_Name	GroupCount
1	FORT BEND	8
2	BRAZORIA	6
3	HARRIS	6
4	GALVESTON	5
5	CALHOUN	4
6	JACKSON	3
7	WALLER	3
8	WHARTON	3
9	ARANSAS	2
10	DE WITT	2
11	JASPER	2

	CZ_Name	GroupCount	
12	LEE		2
13	MATAGORDA		2
14	MONTGOMERY	,	2
15	NUECES		2
16	POLK		2
17	REFUGIO		2
18	SAN JACINTO		2
19	SAN PATRI		2
20	VICTORIA		2
21	WALKER		2
22	AUSTIN		1
23	BASTROP		1
24	BEE		1
25	BEXAR		1
26	BRAZOS		1
27	BRISCOE		1
28	BURLESON		1
29	CALDWELL		1
30	CHAMBERS		1
31	COMAL		1
32	ECTOR		1
33	FAYETTE		1
34	GOLIAD		1
35	GONZALES		1
36	GRIMES		1
37	GUADALUPE		1
38	HARDIN		1
39	HAYS		1
40	HOCKLEY		1
41	JEFFERSON		1
42	JIM WELLS		1
43	KLEBERG		1
44	LAVACA		1
45	LIBERTY		1

	CZ_Name	GroupCount
46	LIVE OAK	1
47	LUBBOCK	1
48	MADISON	1
49	NEWTON	1
50	ORANGE	1
51	TYLER	1
52	WASHINGTON	1

- 1. FORT BEND
- 2. BRAZORIA
- 3. HARRIS

Three Counties with Most Events in State 2

Either type out, show in a table, or show in a clear visualization the three counties with the most events in state 2.

Hharvey = 102×24 table

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	119753	723449	TEXAS	2017	August	Tropical Storm	GALVESTON
2	119753	720871	TEXAS	2017	August	Flash Flood	GALVESTON
3	119753	720861	TEXAS	2017	August	Flash Flood	HARRIS
4	119753	723473	TEXAS	2017	August	Tropical Storm	FORT BEND
5	119753	720852	TEXAS	2017	August	Flash Flood	FORT BEND
6	119753	723472	TEXAS	2017	August	Tropical Storm	MONTGOMERY
7	119753	728349	TEXAS	2017	August	Flash Flood	MONTGOMERY
8	119746	719342	TEXAS	2017	August	Flash Flood	JEFFERSON
9	119753	720865	TEXAS	2017	August	Flash Flood	BRAZORIA
10	119859	718519	TEXAS	2017	August	Hurricane	ARANSAS
11	119746	719489	TEXAS	2017	August	Flash Flood	ORANGE
12	119859	720925	TEXAS	2017	August	Hurricane	NUECES

	EpisodelD	Event_ID	State	Year	Month	Event_Type	CZ_Name
13	119753	723658	TEXAS	2017	August	Tropical Storm	LIBERTY
14	119753	723475	TEXAS	2017	August	Tropical Storm	WALKER
15	119746	719493	TEXAS	2017	August	Flash Flood	HARDIN
16	119753	728395	TEXAS	2017	August	Flash Flood	WALKER
17	119859	720923	TEXAS	2017	August	Hurricane	SAN PATRI
18	119859	720951	TEXAS	2017	August	Hurricane	REFUGIO
19	119753	723646	TEXAS	2017	August	Tropical Storm	MATAGORDA
20	119753	723647	TEXAS	2017	August	Tropical Storm	JACKSON
21	119753	723474	TEXAS	2017	August	Tropical Storm	SAN JACINTO
22	119753	728390	TEXAS	2017	August	Flash Flood	SAN JACINTO
23	119753	723657	TEXAS	2017	August	Tropical Storm	WALLER
24	119753	723648	TEXAS	2017	August	Tropical Storm	POLK
25	119753	720805	TEXAS	2017	August	Flash Flood	POLK
26	119859	720926	TEXAS	2017	August	Storm Surge/Tide	NUECES
27	119859	720927	TEXAS	2017	August	Hurricane	CALHOUN
28	119753	723656	TEXAS	2017	August	Tropical Storm	WHARTON
29	119859	718740	TEXAS	2017	August	Storm Surge/Tide	ARANSAS
30	119753	723654	TEXAS	2017	August	Tropical Storm	WASHINGTON
31	119859	721006	TEXAS	2017	August	Hurricane	VICTORIA
32	119746	719496	TEXAS	2017	August	Flash Flood	JASPER
33	119753	723655	TEXAS	2017	August	Tropical Storm	MADISON
34	120120	719749	LOUISIANA	2017	August	Flash Flood	CALCASIEU
35	119746	719494	TEXAS	2017	August	Flash Flood	TYLER
36	120216	798846	TEXAS	2017	August	Flood	FAYETTE
37	119753	723653	TEXAS	2017	August	Tropical Storm	GRIMES
38	119746	719497	TEXAS	2017	August	Flash Flood	NEWTON
39	119859	720932	TEXAS	2017	August	Storm Surge/Tide	CALHOUN
40	119859	721360	TEXAS	2017	August	Flood	VICTORIA
41	119753	723651	TEXAS	2017	August	Tropical Storm	BURLESON
42	120120	719755	LOUISIANA	2017	August	Flash Flood	BEAUREGARD
43	119753	723650	TEXAS	2017	August	Tropical Storm	BRAZOS
44	120216	720625	TEXAS	2017	August	Flood	CALDWELL
45	120214	798842	TEXAS	2017	August	Flood	DE WITT
46	119859	720924	TEXAS	2017	August	Storm Surge/Tide	SAN PATRI

	EpisodelD	Event_ID	State	Year	Month	Event_Type	CZ_Name
47	119753	720704	TEXAS	2017	August	Tornado	FORT BEND
48	120216	798845	TEXAS	2017	August	Flood	BASTROP
49	119859	721361	TEXAS	2017	August	Flood	CALHOUN
50	119859	721002	TEXAS	2017	August	Hurricane	GOLIAD
51	119753	723659	TEXAS	2017	August	Tropical Storm	CHAMBERS
52	120216	720277	TEXAS	2017	August	Tropical Storm	COMAL
53	119753	767338	TEXAS	2017	August	Tornado	FORT BEND
54	119753	720473	TEXAS	2017	August	Tornado	FORT BEND
55	119753	720471	TEXAS	2017	August	Tornado	FORT BEND
56	119753	767027	TEXAS	2017	August	Tornado	BRAZORIA
57	119753	720676	TEXAS	2017	August	Tornado	WALLER
58	119753	720477	TEXAS	2017	August	Tornado	FORT BEND
59	119753	720680	TEXAS	2017	August	Tornado	HARRIS
60	119753	720461	TEXAS	2017	August	Tornado	MATAGORDA
61	119753	720707	TEXAS	2017	August	Tornado	WHARTON
62	120216	798844	TEXAS	2017	August	Flood	LEE
63	120120	720006	LOUISIANA	2017	August	Tornado	ACADIA
64	119753	720677	TEXAS	2017	August	Tornado	WALLER
65	119753	720709	TEXAS	2017	August	Tornado	GALVESTON
66	120216	798843	TEXAS	2017	August	Flood	HAYS
67	119753	721321	TEXAS	2017	August	Flash Flood	JACKSON
68	119753	721322	TEXAS	2017	August	Flash Flood	JACKSON
69	119753	728921	TEXAS	2017	August	Flash Flood	AUSTIN
70	120216	720275	TEXAS	2017	August	Tropical Storm	BEXAR
71	120216	720283	TEXAS	2017	August	Tropical Storm	LAVACA
72	120216	720284	TEXAS	2017	August	Tropical Storm	LEE
73	120214	720264	TEXAS	2017	August	Hurricane	DE WITT
74	120216	720279	TEXAS	2017	August	Tropical Storm	GONZALES
75	119753	720674	TEXAS	2017	August	Tornado	HARRIS
76	119753	720466	TEXAS	2017	August	Tornado	BRAZORIA
77	119753	720463	TEXAS	2017	August	Tornado	BRAZORIA
78	120120	719742	LOUISIANA	2017	August	Flood	CAMERON
79	120216	720280	TEXAS	2017	August	Tropical Storm	GUADALUPE
80	119753	720706	TEXAS	2017	August	Tornado	HARRIS

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
81	119753	720699	TEXAS	2017	August	Tornado	WHARTON
82	119753	720470	TEXAS	2017	August	Tornado	BRAZORIA
83	119753	720710	TEXAS	2017	August	Tornado	HARRIS
84	118032	709525	TEXAS	2017	August	Thunderstorm Wind	HOCKLEY
85	119753	720460	TEXAS	2017	August	Tornado	BRAZORIA
86	119753	720672	TEXAS	2017	August	Tornado	FORT BEND
87	119753	720686	TEXAS	2017	August	Tornado	HARRIS
88	119859	720983	TEXAS	2017	August	Storm Surge/Tide	REFUGIO
89	120120	720007	LOUISIANA	2017	August	Tornado	CAMERON
90	117836	708282	TEXAS	2017	August	Thunderstorm Wind	BRISCOE
91	119859	721355	TEXAS	2017	August	Tropical Storm	KLEBERG
92	119859	721357	TEXAS	2017	August	Tropical Storm	LIVE OAK
93	119859	721358	TEXAS	2017	August	Tornado	CALHOUN
94	119859	721354	TEXAS	2017	August	Hurricane	BEE
95	119853	718515	TEXAS	2017	August	Thunderstorm Wind	ECTOR
96	120120	720001	LOUISIANA	2017	August	Tornado	CAMERON
97	119746	719740	TEXAS	2017	August	Thunderstorm Wind	JASPER
98	120120	720002	LOUISIANA	2017	August	Tornado	VERMILION
99	119753	721133	TEXAS	2017	August	Flash Flood	GALVESTON
100	119859	721356	TEXAS	2017	August	Tropical Storm	JIM WELLS

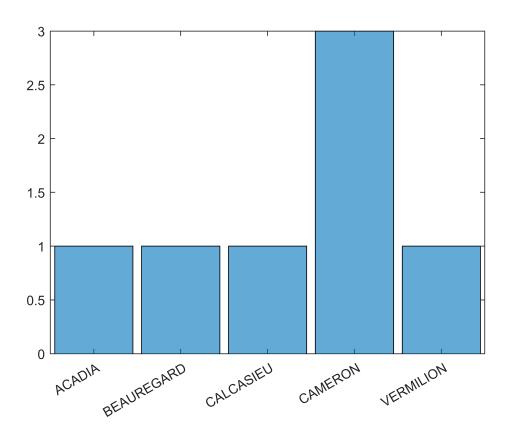
```
Hharvey = Hharvey(Hharvey.State == 'LOUISIANA',:);
Hharvey.Event_Type = removecats(Hharvey.Event_Type,{'Astronomical Low Tide','Avalanche','Blizza
Hharvey.Event_Type = removecats(Hharvey.Event_Type,{'Tropical Storm','Storm Surge/Tide'})
```

Hharvey = 7×24 table

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
1	120120	719749	LOUISIANA	2017	August	Flash Flood	CALCASIEU
2	120120	719755	LOUISIANA	2017	August	Flash Flood	BEAUREGARD
3	120120	720006	LOUISIANA	2017	August	Tornado	ACADIA
4	120120	719742	LOUISIANA	2017	August	Flood	CAMERON
5	120120	720007	LOUISIANA	2017	August	Tornado	CAMERON
6	120120	720001	LOUISIANA	2017	August	Tornado	CAMERON

	EpisodeID	Event_ID	State	Year	Month	Event_Type	CZ_Name
7	120120	720002	LOUISIANA	2017	August	Tornado	VERMILION

histogram(removecats(Hharvey.CZ_Name))



- 1. CAMERON
- 2. ACADIA
- 3. BEAUREGARD

Three Counties with Highest Property Cost in State 1

Either type out, show in a table, or show in a clear visualization the three counties with the highest reported property cost in state 1. Be sure to include the dollar amount.

- 1. GALVESTON \$10 000,000,000
- 2. HARRIS \$8 000,000,000
- 3. FORT BEND \$8 000,000,000

Three Counties with Highest Property Cost in State 2

Either type out, show in a table, or show in a clear visualization the three counties with the highest reported property cost in state 2. Be sure to include the dollar amount.

- 1. CALCASIEU \$60 000,000
- 2. BEAUREGARD \$15 000,000
- 3. ACADIA \$2 000,000

Section 4: Conclusions and Recommendations

Summarize your analysis. Make a recommendation supported by the data.

The two States worst affected by Hurricane Harvey are Texas and Louisiana. The 3 worst affected counties in Texas with regards to property cost in order from highest to lowest are Galveston, Harris, and Fort Bend. The 3 worst affected counties in Louisiana with regards to property cost in order from highest to lowest are Calcasieu, Beauregard and Acadia. The worst affected counties in both States with regards to property cost in order from highest to lowest are Galveston, Harris, Fort Bend, Calcasieu, Beauregard, and Acadia. Therefore from the information gathered I would recommend the the insurance company to send the contractors to the State of Texas starting with Galveston county, Harris, Fort Bend and so on in that order. The after dealing with the worst cases in Texas they can move on to Louisiana starting with Calcasieu, Beauregard, Acadia and so on in that order.