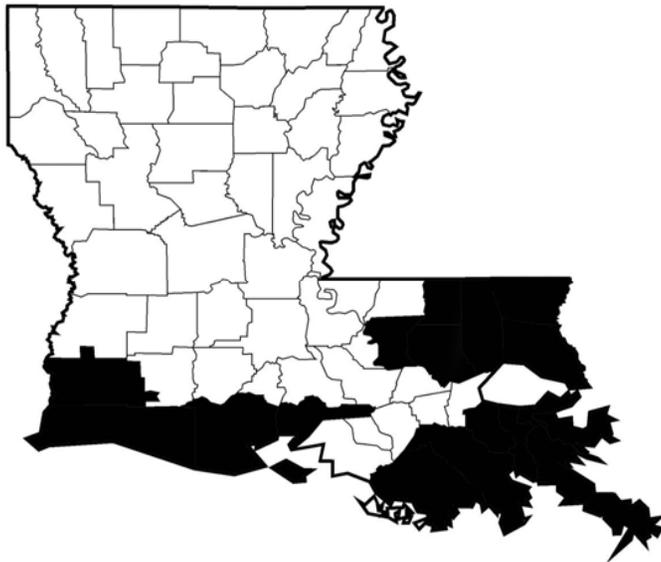


Migration Patterns

Estimates of Parish Level Migrations
due to Hurricanes Katrina and Rita





Overview

- Overall impact of Katrina and Rita on parish populations
- Migration patterns: in-migrations, net migrations and out-migrations
- Most impacted Parishes – Where did they go?
- The special cases of Jefferson and St. Tammany
- Regions that gained population – Where did they come from?
- Summary of Findings
- Next Steps



Data Sources

Population Division; US Census Bureau

- Annual Estimates 2002 – 2006
- Components of Change 2002 – 2006

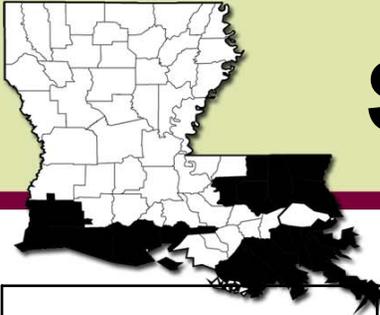
2006 Louisiana Health and Population Survey

- Survey of 18 parishes in Southern Louisiana
- Did you live here before the 2005 hurricanes?
- If no, what was your pre-hurricane parish or county?
- If no, why did you move?



Important Notes

- Survey and estimates are a snapshot in time approximately a year after the hurricanes. Population dynamics will continue to be affected by the hurricanes for years to come.
- Point estimates imply a level of precision that does not exist. These are estimates subject to a degree of error – these numbers should be rounded when communicating to the public.
- Intent of the study is to quantify the tremendous impacts on Louisiana's population in terms of displacements and the redistribution of our citizens.



Storm-Related Losses

Geographic Area	July 1, 2005	July 1, 2006	Change 05-06	2002-2005 3yr ave growth	Katrina / Rita Related Gain / Loss	% Gain / Loss from 2005
Louisiana	4,507,331	4,287,768	-219,563	12,263	-231,826	-5%
Orleans	452,170	223,388	-228,782	-6,423	-222,359	-49%
St. Bernard	65,147	15,514	-49,633	-393	-49,240	-76%
Jefferson	451,049	431,361	-19,688	-127	-19,561	-4%
Plaquemines	28,903	22,512	-6,391	528	-6,919	-24%
Cameron	9,611	7,792	-1,819	-50	-1,769	-18%
Calcasieu	184,708	184,524	-184	566	-750	0%

Note: These numbers represent 'net change' and include in-migrations, out-migrations, births and deaths. Assumes changes beyond normal are due to the hurricanes.



Storm-Related Gains

Geographic Area	July 1, 2005	July 1, 2006	Change 05-06	2002- 2005 3- yr ave growth	Katrina / Rita Related Gain / Loss	% Gain / Loss from 2005
Louisiana	4,507,331	4,287,768	-219,563	12,263	-231,826	-5%
East Baton Rouge	409,809	429,073	19,264	35	19,229	5%
Tangipahoa	106,152	113,137	6,985	1,298	5,687	5%
St. Tammany	219,814	230,605	10,791	6,025	4,766	2%
Ascension	90,447	97,335	6,888	2,918	3,970	4%
Livingston	108,958	114,805	5,847	3,343	2,504	2%
St. Charles	50,554	52,761	2,207	498	1,709	3%
Terrebonne	107,094	109,348	2,254	563	1,691	2%
Lafourche	91,910	93,554	1,644	391	1,253	1%
Iberia	74,212	75,509	1,297	199	1,098	1%
St. Helena	10,138	10,759	621	-90	711	7%
Vermilion	55,267	56,021	754	340	414	1%
Washington	44,277	44,750	473	151	322	1%



False Assumptions vs Reality

False Assumption

About 20,000 people were displaced from Jefferson Parish and they probably moved north along I-10.

Reality

Jefferson lost about 70,000 people and gained another 50,000 from neighboring parishes

False Assumption

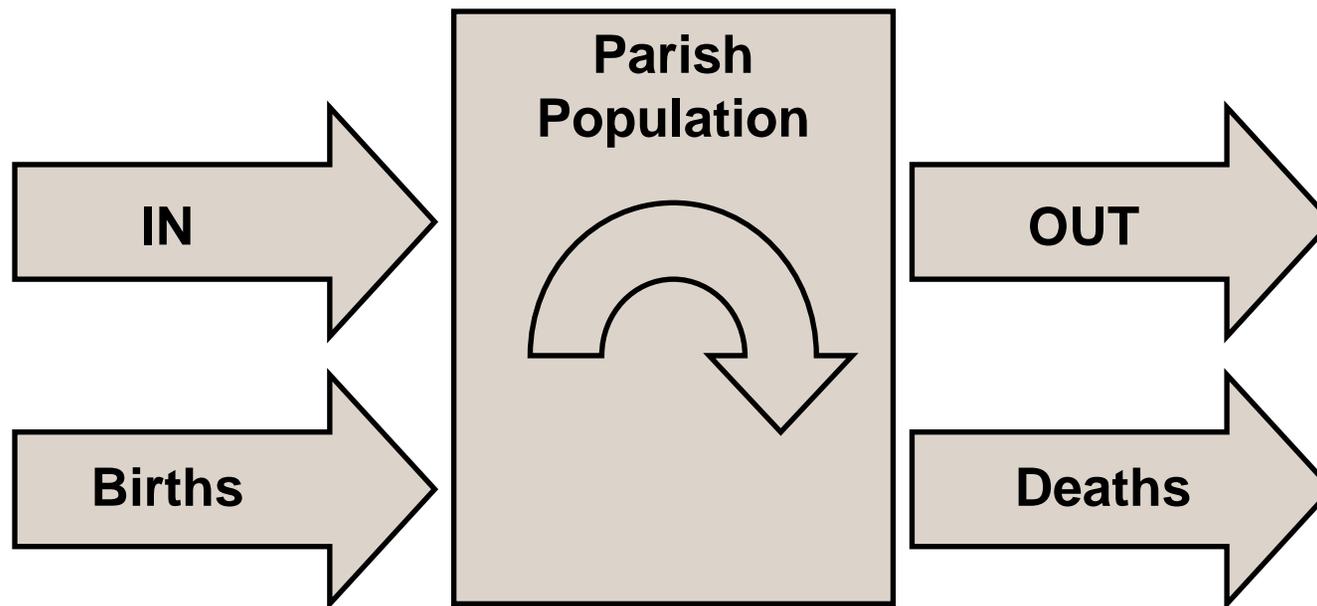
About 5,000 people from the southeastern parishes moved north into St Tammany parish

Reality

St Tammany picked up about 15,000 displaced and lost about 10,000 citizens of its own.



Estimating Outmigration



$$\text{Net Change} = (\text{IN} + \text{Births}) - (\text{OUT} + \text{Deaths})$$

$$\text{Net Migration} = \text{IN} - \text{OUT}$$

 Represents within parish migrations



Estimating Out-Migration

Parish	Net Mig	Net Migration		In-Migration		Out-Migration	
	2002-2005 3yr average	2005-2006	05 to 06 Storm Related	2005-2006	05 to 06 Storm Related	2005-2006	05 to 06 Storm Related
Calcasieu	-323	-1,153	-830	13,062	***	14,215	***
Cameron	-61	-1,813	-1,752	1,191	835	3,004	2,588
East Baton Rouge	-1,938	17,210	19,148	58,897	33,821	41,687	14,674
Jefferson	-1,824	-21,674	-19,850	63,023	50,692	84,697	70,542
Orleans	-7,906	-226,115	-218,209	20,274	***	246,389	***
Plaquemines	368	-6,466	-6,834	2,536	1,654	9,002	8,488
St. Bernard	-424	-48,905	-48,481	***	***	***	***
St. Charles	183	1,823	1,640	5,901	3,856	4,078	2,216
St. Tammany	4,874	9,464	4,590	29,041	14,852	19,577	10,262
Tangipahoa	789	6,623	5,834	16,094	11,907	9,471	6,073

Net Migration from US Census Annual Estimates Components of Change
In-Migration from 2006 Louisiana Health and Population Survey
Out-Migration = In-Migration minus Net Migration



Most Impacted Parishes

Summary of Migrations

Parish	All Migration			Katrina/Rita Related Migration			% OUT storm related
	IN	NET	OUT	IN _{kr}	NET _{kr}	OUT _{kr}	
Cameron	1,191	-1,813	3,004	835	-1,752	2,587	86%
Orleans	20,274	-226,115	246,389	***	-218,209	≥218,209	na
Plaquemines	2,536	-6,466	9,002	1,654	-6,834	8,488	94%
St Bernard	***	-48,905	≥48,905	***	-48,481	≥48,481	na

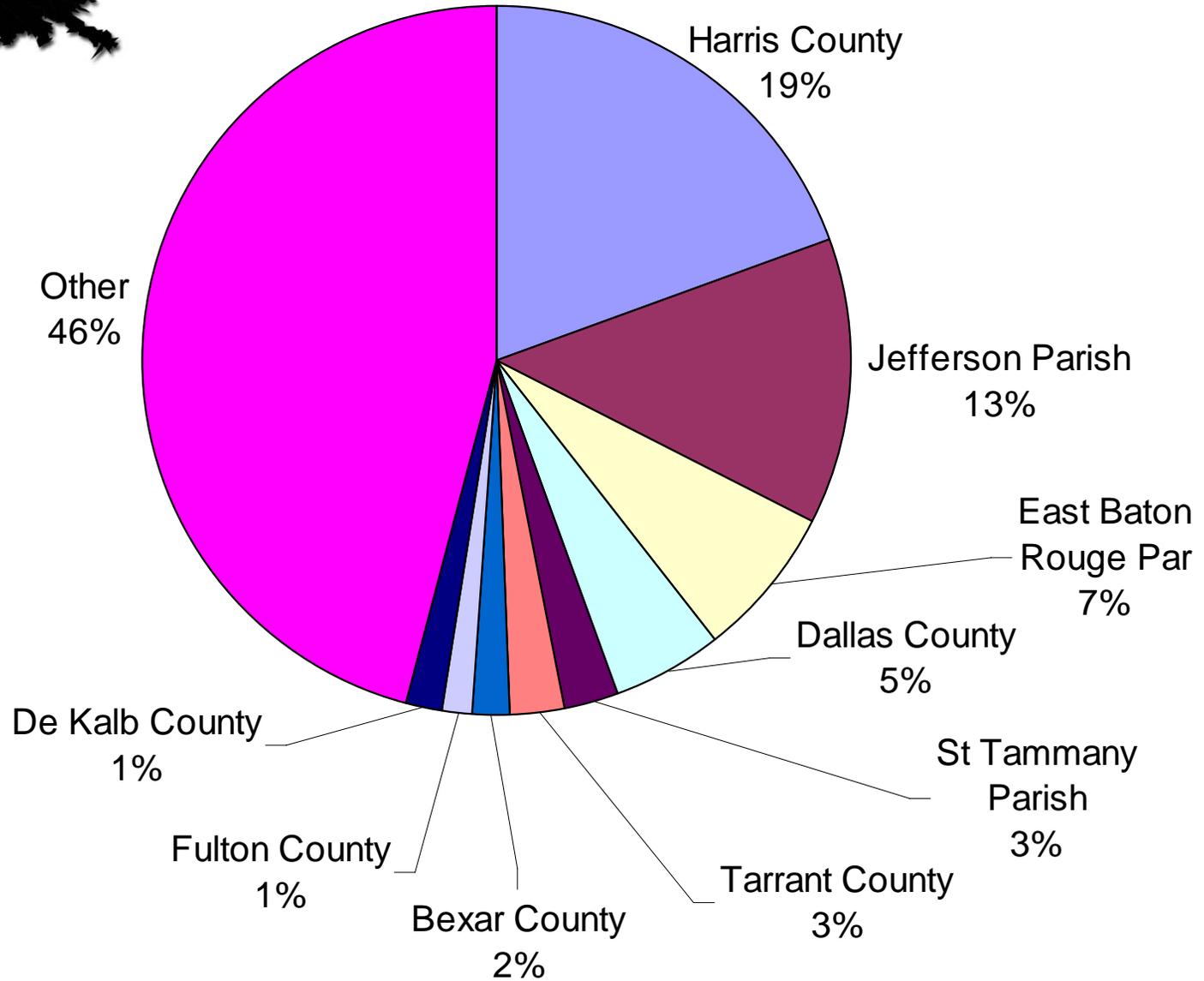


Where did they go?

Orleans	Estimated Migration out of Parish		Estimated Migration out due to Storms		% Migration storm related
	Migration To	Estimate	Percent	Estimate	
Jefferson	45,323	18%	44,512	***	98%
Capital Area (EBR, Ascension, Livingston, St Helena)	23,158	9%	19,631	***	85%
St. Helena only	460	0%	427	***	93%
North Shore (Tangipahoa, St Tammany, Washington)	9,269	4%	9,068	***	98%
Other Surveyed Parishes*	5,275	2%	4,519	***	86%
Other (outside survey and out of state)	163,365	66%	~150,000	***	***
Total	246,390	100%	~230,000	***	***
Estimated Moved within Parish*					
	54,680		46,279		85%



Orleans Out-migrations (IRS)





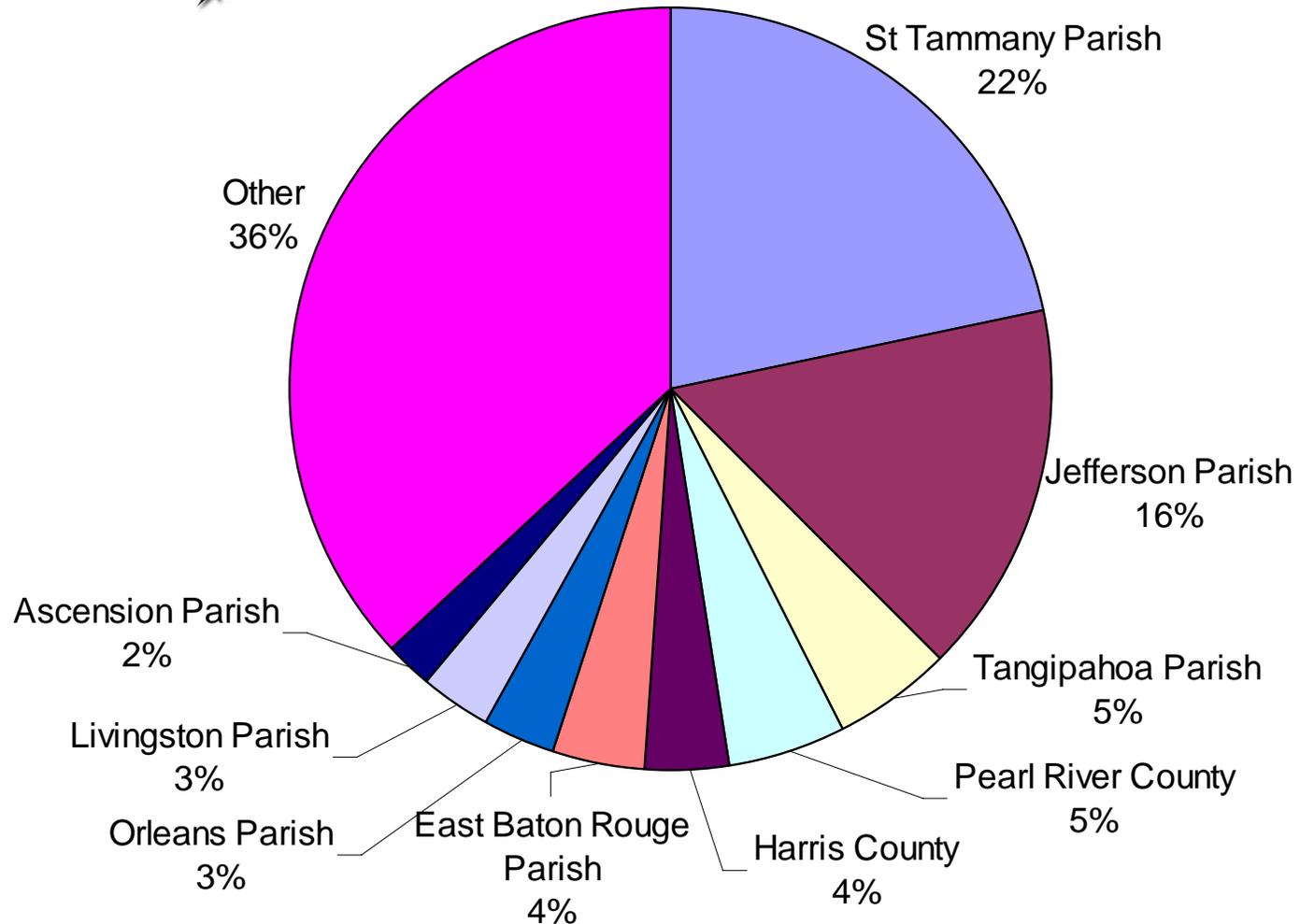
Where did they go?

St Bernard	Estimated Migration out of Parish		Estimated Migration out due to Storms		% Migration storm related
	Estimate	Percent	Estimate	Percent	
Migration to					
North Shore and Pinelands (St. Tammany, Tangipahoa, Washington)	18,296	***	14,140	***	77%
Southeast (Orleans, Plaquemines)	4,432	***	4,008	***	90%
Other Surveyed Parishes*	13,732	***	13,509	***	98%
Other Parishes and Out of State	~15,000	***	~15,000	***	***
Total	~50,000	***	~50,000	***	***

Estimated Moved Within Parish*	5,208	5,018	96%
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St Bernard Out-migrations (IRS)





Where did they go?

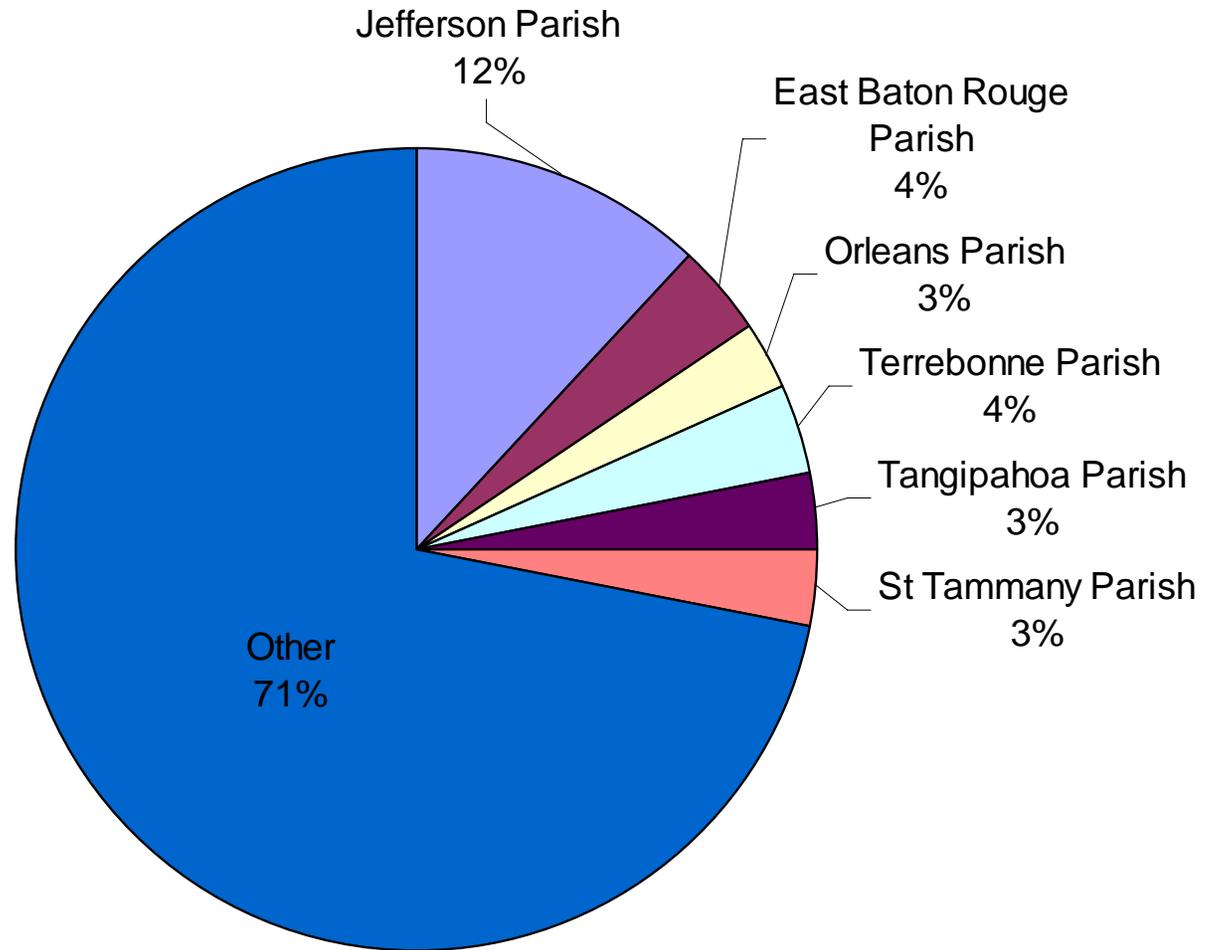
Cameron and **Plaquemines** both had too few migrants found in the other surveyed parishes to derive estimates for locations. However total out-migration and migration within parish are below:

	Estimated Migration	Estimated migration due to Storms	% Migration Storm Related
Cameron Parish			
Outside of the Parish	3,004	2,587	86%
Within the Parish	2,166	2,017	93%
Total	5,170	4,604	89%

Plaquemines Parish			
Outside of the Parish	9,002	8,488	94%
Within the Parish	5,346	4,666	87%
Total	14,348	13,154	92%

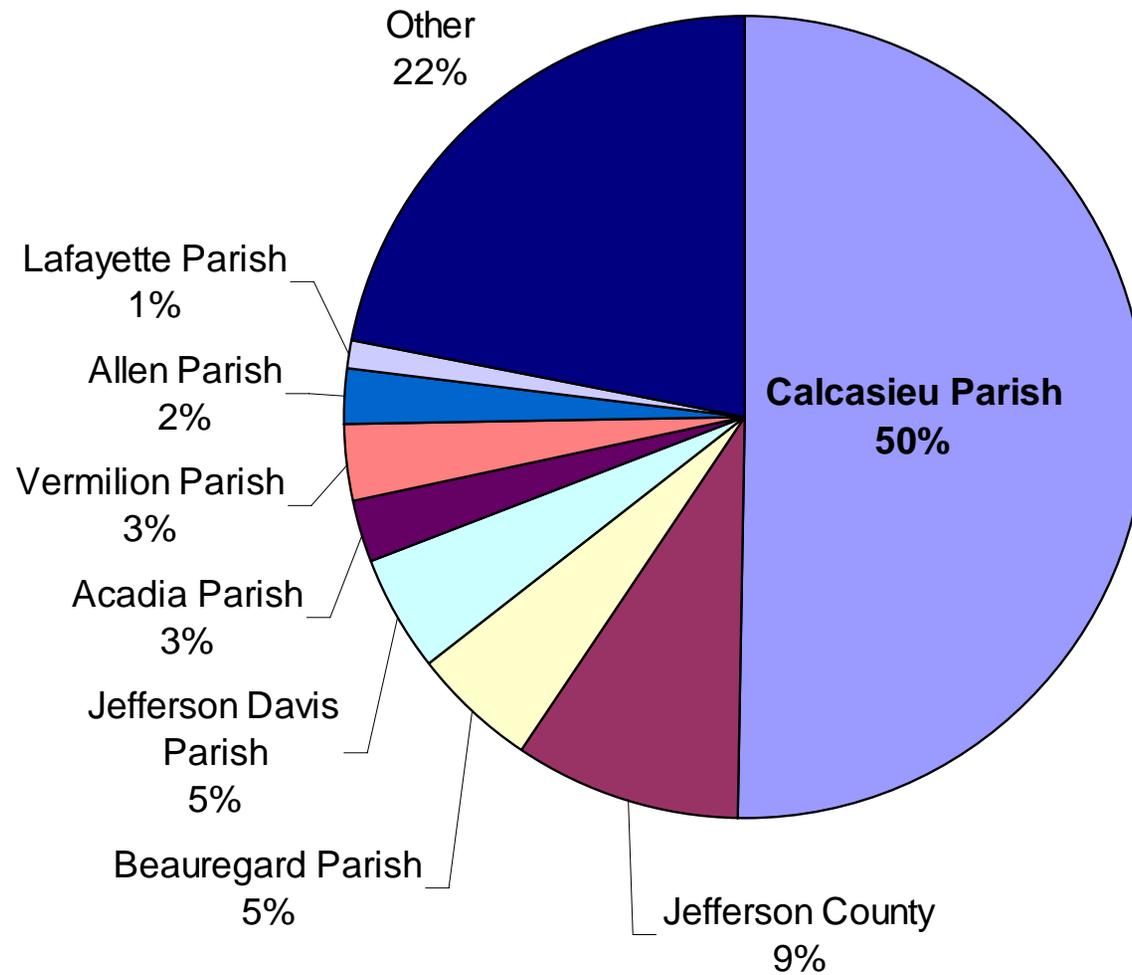


Plaquemines Out-migration (IRS)





Cameron Out-migration (IRS)





Capital Area In-Migrants

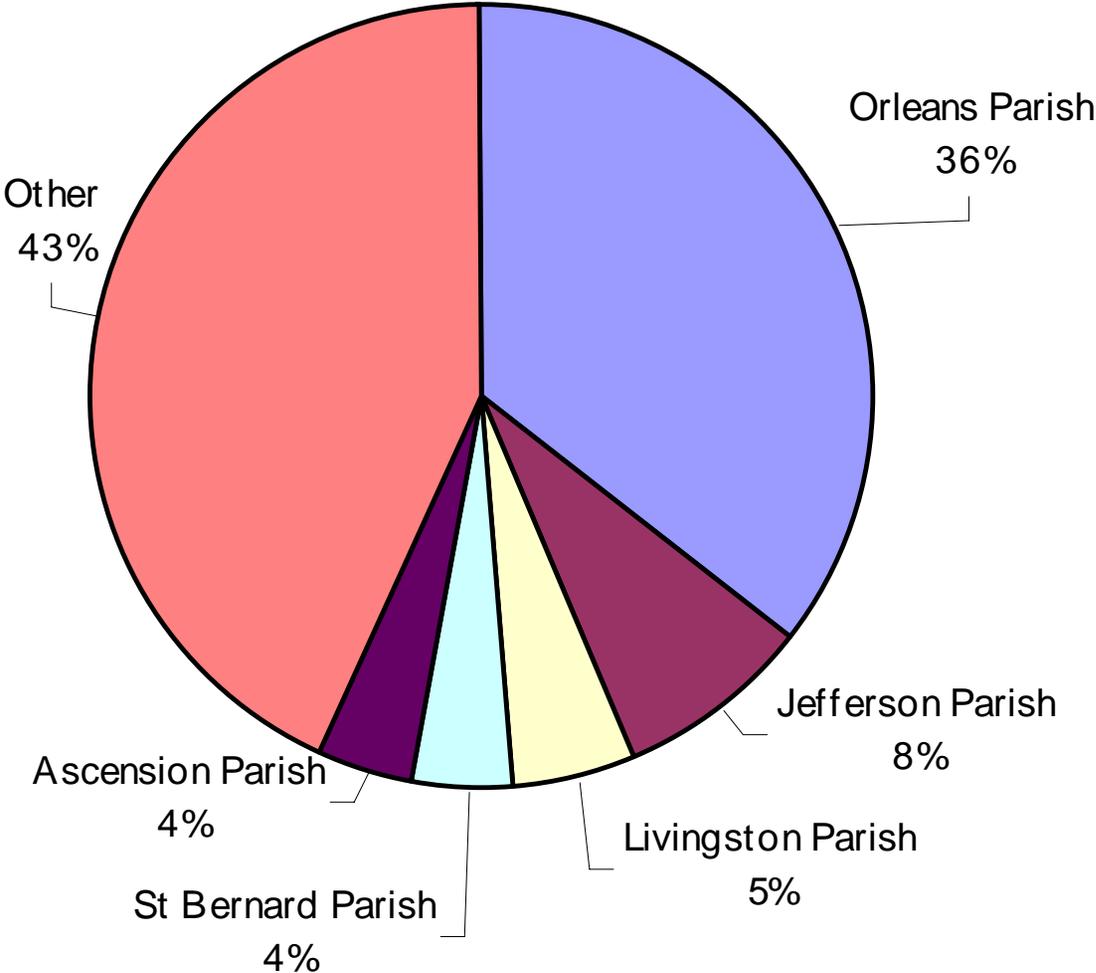
(EBR, Ascension, Livingston, St Helena)

Where did they come from?

Migration from	Estimated Migrants		Estimated Migrants due to storm		% Storm Related
	Estimate	Percent	Estimate	Percent	
Southeast (Orleans, Plaquemines, & St. Bernard)	32,790	44%	29,264	68%	89%
Orleans only	23,158	31%	19,631	46%	85%
North Shore & Pinelands (Tangipahoa, St. Tammany, & Washington)	2,467	3%	***	***	***
Tangipahoa only	1,416	2%	***	***	***
Other Parishes in Louisiana*	20,827	28%	***	***	***
Out of State	9,983	13%	***	***	***
Not Indicated**	8,189	11%	***	***	***
Total	74,257	100%	42,983	100%	58%



EBR In-migrations (IRS)





Northshore In-Migrants

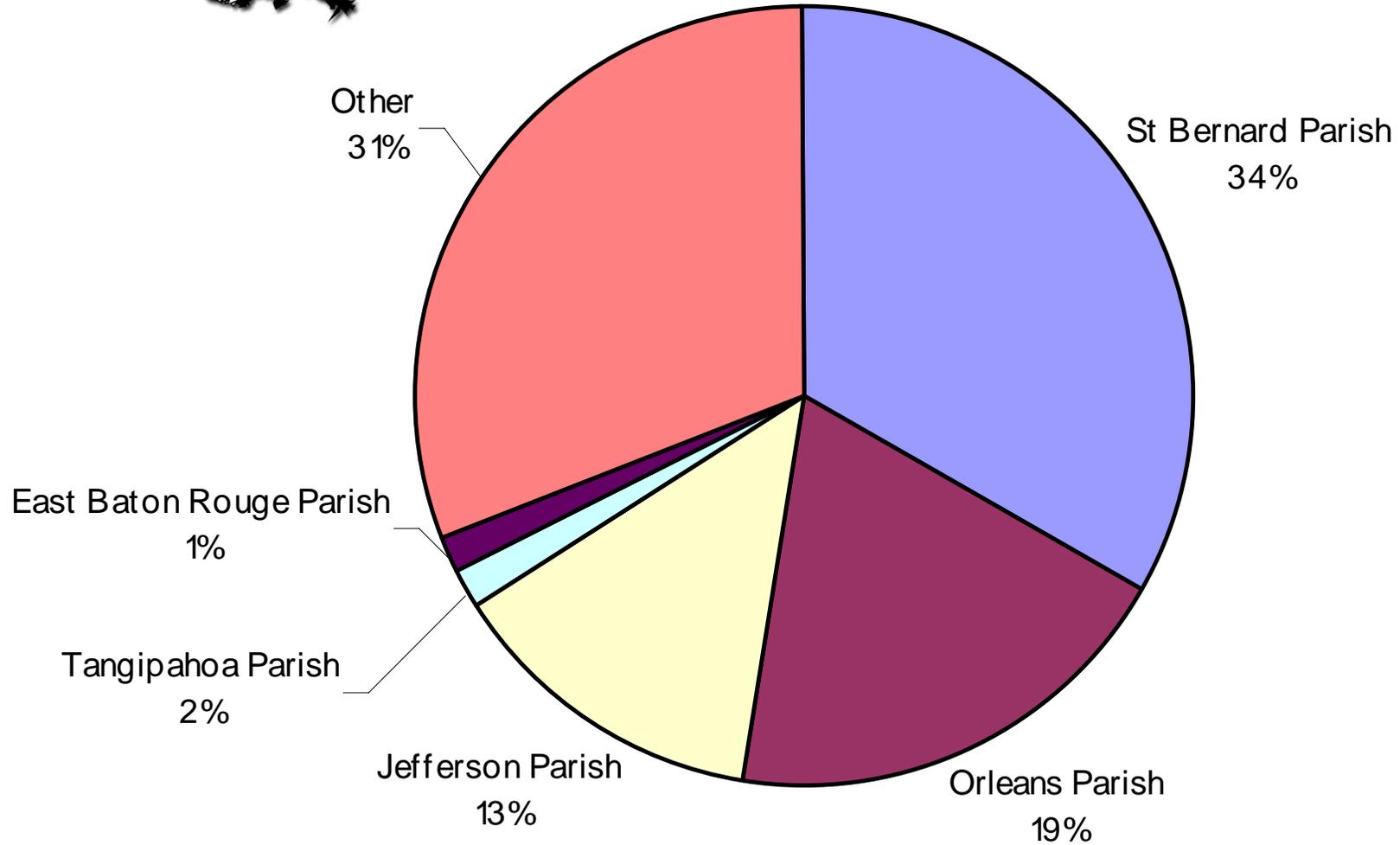
(St Tammany, Tangipahoa, Washington)

Where did they come from?

Migration from	Estimated Migrants		Estimated Migrants due to storm		% Storm Related
	Estimate	Percent	Estimate	Percent	
Southeast (Orleans, Plaquemines, & St. Bernard)*	27,566	61%	23,207	89%	84%
Orleans only	9,270	20%	9,068	35%	98%
St. Bernard only	18,296	40%	14,140	54%	77%
Other Parishes in Louisiana**	9,088	20%	***	***	***
Out of State	5,491	12%	***	***	***
Not Indicated	***	***	***	***	***
Total	45,455	100%	26,177	100%	58%



St Tammany In-migrations (IRS)





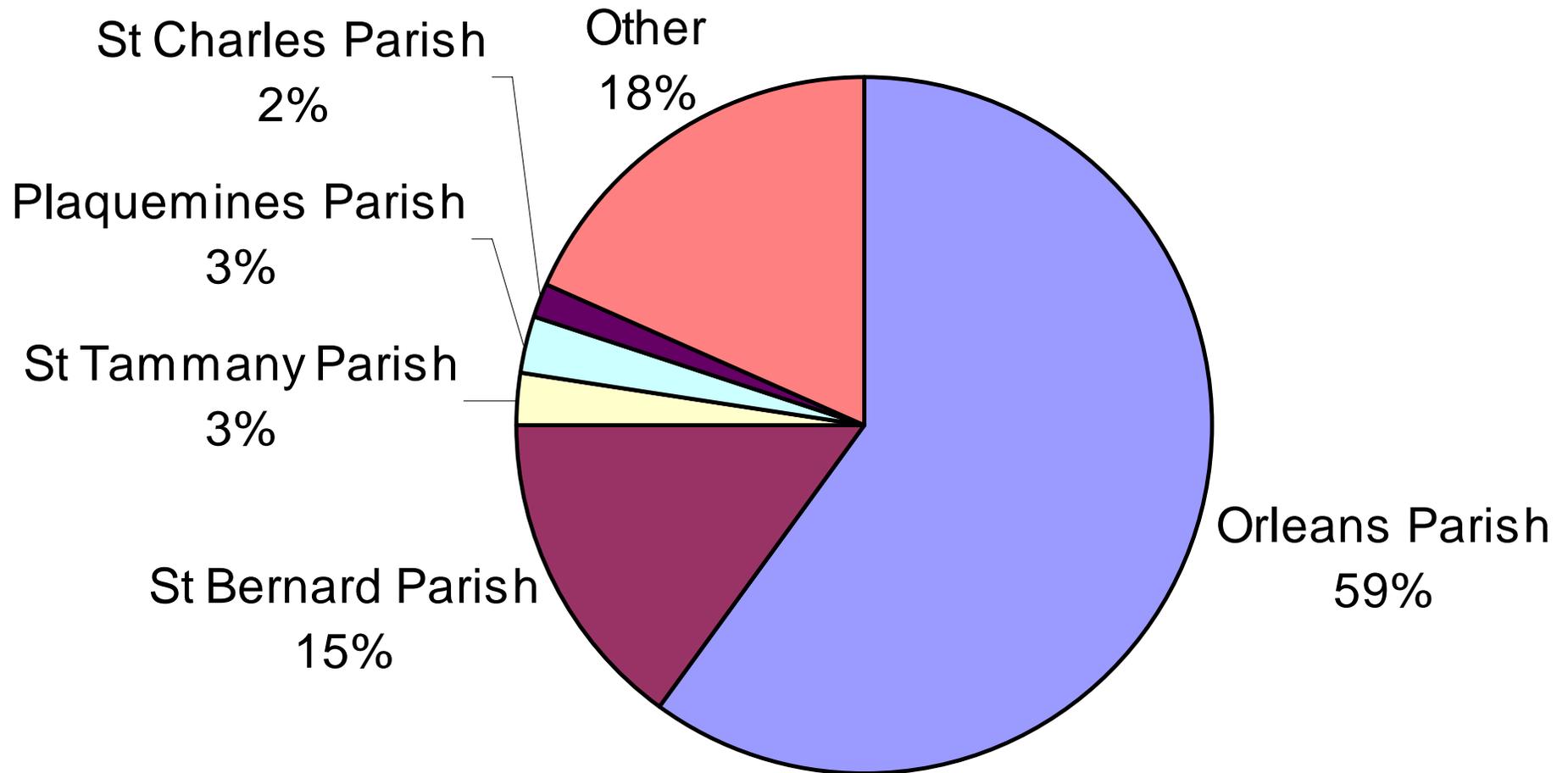
Jefferson / St Charles In-Migrants

Where did they come from?

Migration from	Estimated Migrants		Estimated Migrants due to storm		% Storm Related
	Estimate	Percent	Estimate	Percent	
Southeast (Orleans, Plaquemines, & St. Bernard)	51,263	76%	50,071	94%	98%
Orleans only	47,092	70%	46,123	86%	98%
Other Parishes in Louisiana*	***	***	***	***	***
Out of State	9,741	14%	***	***	***
Not Indicated	***	***	***	***	***
Total	67,182	100%	53,406	100%	79%



Jefferson In-migrations (IRS)





Summary of Findings

- Orleans parish has significant challenges with the most citizens displaced the furthest.
- St Bernard had a greater percent loss of population; about a third of these went to the north shore parishes.
- The more rural parishes of Cameron and Plaquemines had a higher percentage relocate within their original parish or in nearby parishes
- Parishes of Jefferson and St Tammany have additional challenges of in-migration AND out-migration due to the hurricanes
- There were significant storm-related migrations within the most affected parishes.



Conclusions

- Orleans parish in particular will face huge challenges with the most citizens displaced the furthest.
- Modes and means of evacuation likely have a large impact on how far individuals were displaced.
- This evaluation is useful in providing a broad picture of migrations to Louisiana's leadership; however more work is needed to fully understand and address the barriers to return that still exist.



Contact

Questions, Comment, Concerns

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