

Sociodemographic Context of Puerto Rico and its Municipalities: Where are We?



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> Filantropía PR 2023 Annual Convening Experience

Outline

I. Puerto Rico's population trend

Fluctuations in demographic components

II. Where are we regarding the sociodemographic characteristics?

Puerto Rico Municipios

Regions

III. What to expect in the near future

IV. Final notes

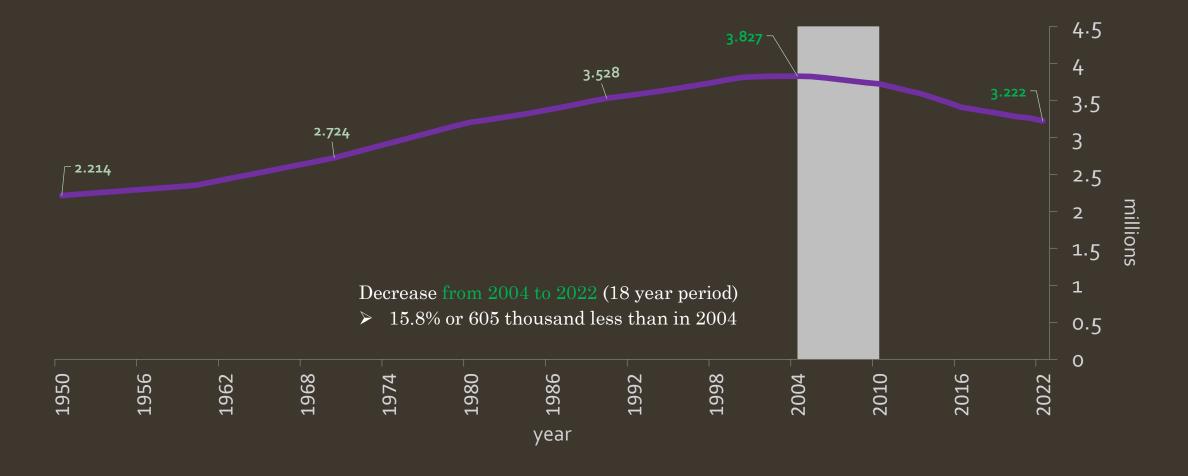
V. Questions, comments?





Puerto Rico's population trend

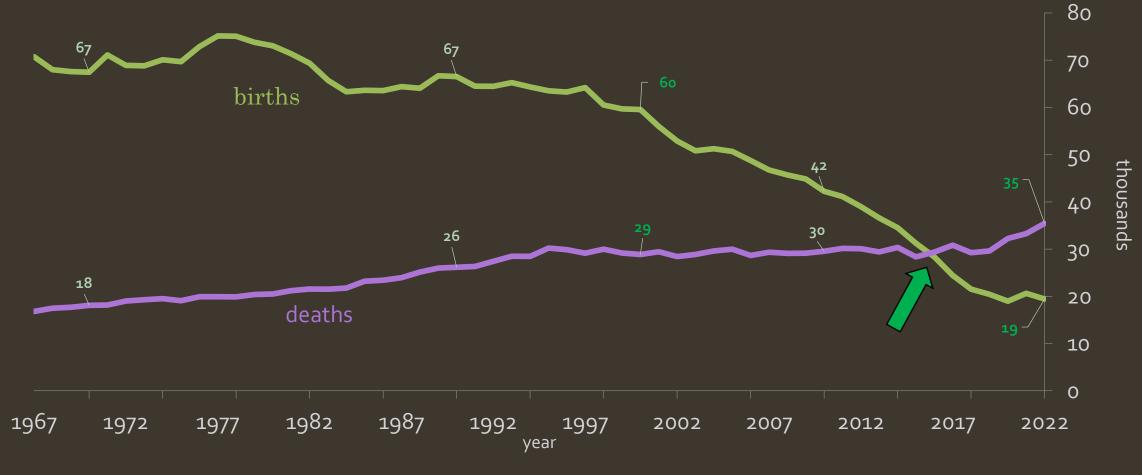
Total population - Puerto Rico



By: Instituto de Estadísticas de Puerto Rico Source: Estimaciones intercensales poblacionales, Junta de Planificación, 1950-2000; Intercensal Population Estimates, Population Division, U.S. Census Bureau, 2000-10 y 2020-2022 Vintage 2022, Population Estimates Program, U.S. Census Bureau.



Vital events - Puerto Rico



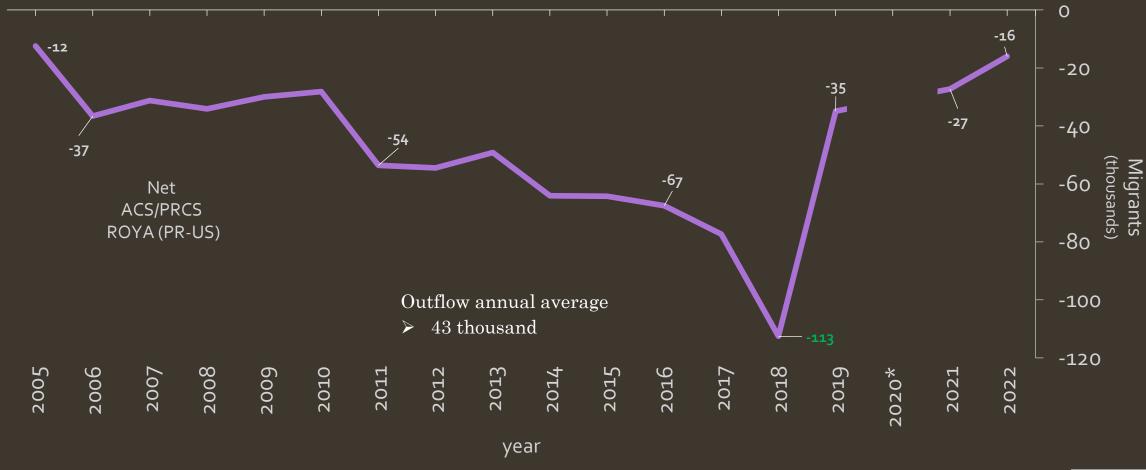
*2021-2022 are preliminary data.

By: Instituto de Estadísticas de Puerto Rico

Source: Registro Demográfico, Departamento de Salud.



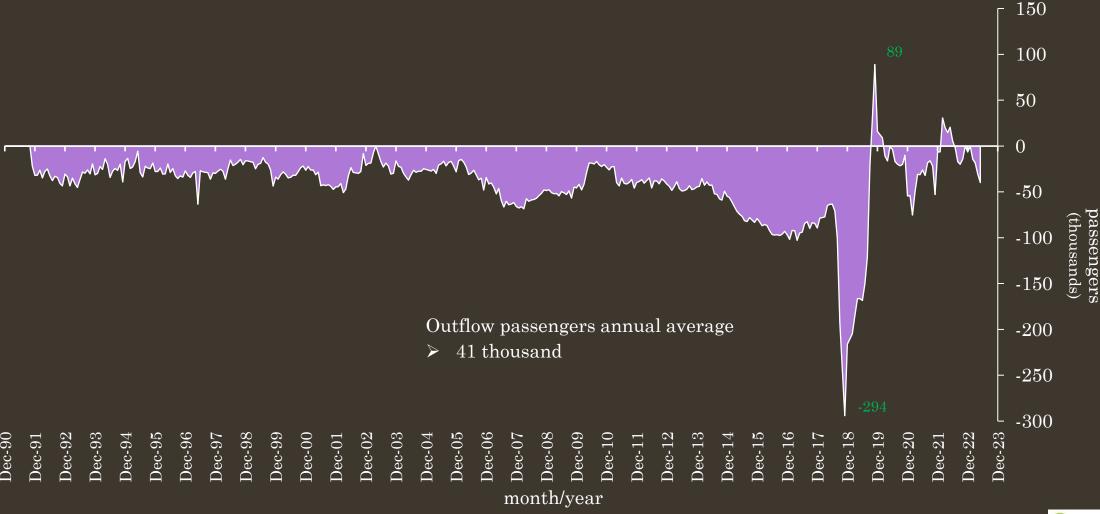
Net migration between PR and US







Puerto Rico passengers' net movement: 1990-2020 (domestic and international flights)

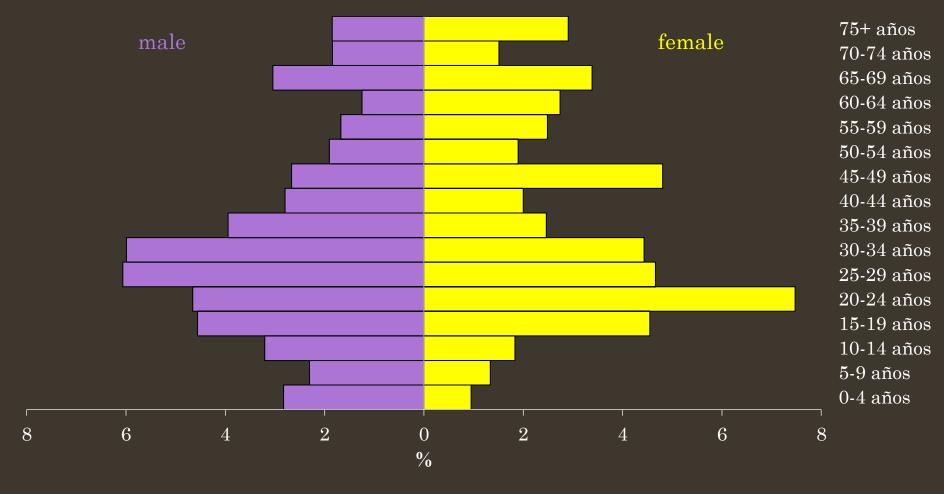




Source: U.S. Bureau of Transportation Statistics, Air Carrier Statistics, Form 41 Traffic, T-100 Segment, All Carriers.



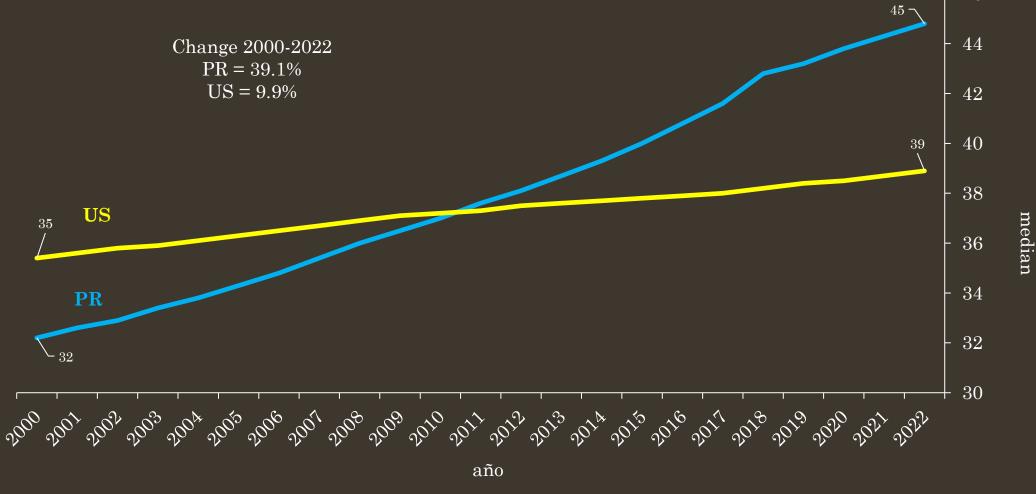
Emigrants age and sex structure: 2021



By: Instituto de Estadísticas de Puerto Rico Source: Public Use Microdata Samlple (PUMS), American Community Survey (ACS), 1-year estimates 2021, U.S. Census Bureau.



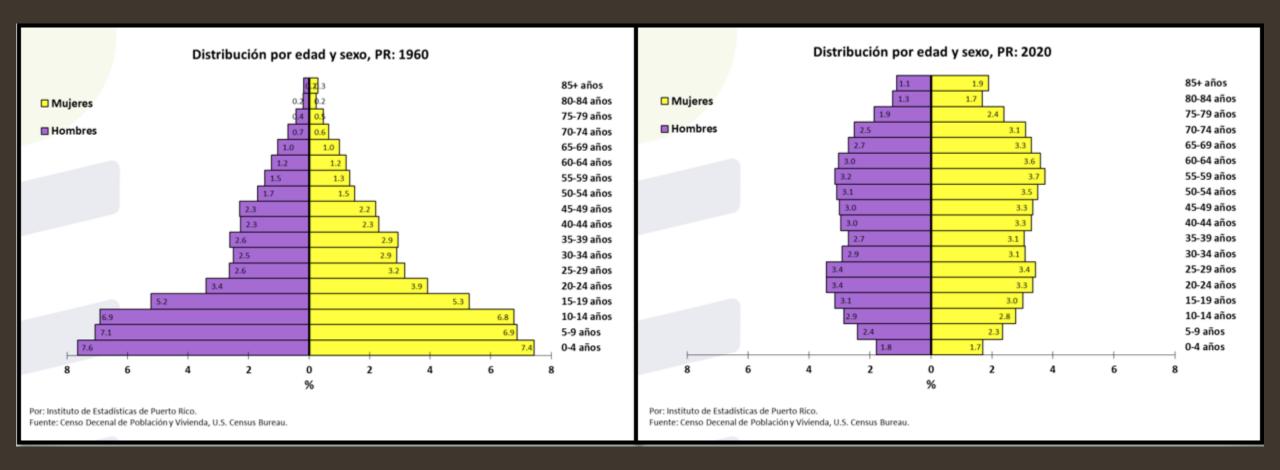
Median age PR and US





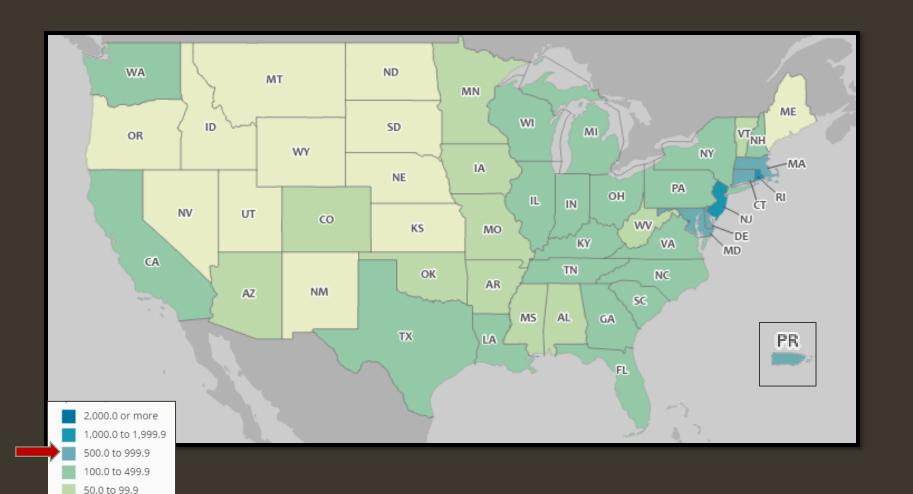


Puerto Rico age and sex structure: 1960 vs. 2020





Population density – States and Puerto Rico



Less than 50.0

U.S. density = 93.7

Population Density: 959.6 Total Population: 3,285,874 Land Area (sq mi): 3,424.3

2010 (*1,088*) vs. 2020 (960)

= 128 persons or less /m²

Jurisdictions with:

- > 2k o more p/m²
 - \rightarrow DC = 11,280
- > 1k to 1,999k p/m²
 - $\rightarrow NJ = 1,263$
 - RI = 1,061
- > 500 to 999 p/m²
 - PR = 960
 - MA = 901





Where are we regarding the sociodemographic characteristics?

Puerto Rico and Municipios

Total population -Municipios

- ➤ The municipios' total population changed between -0.1% to -29.0%
- Municipios with the largest decrease (%):
 Guánica (29%), Maricao (24%),
 Loíza (21%) and Yabucoa (20%)
- ➤ 43 municipios lost more than 10% of their population
- Municipios with the least decrease:
 Rincón (-0.1%), Culebra (1%),
 Naranjito and Barranquitas (4%)

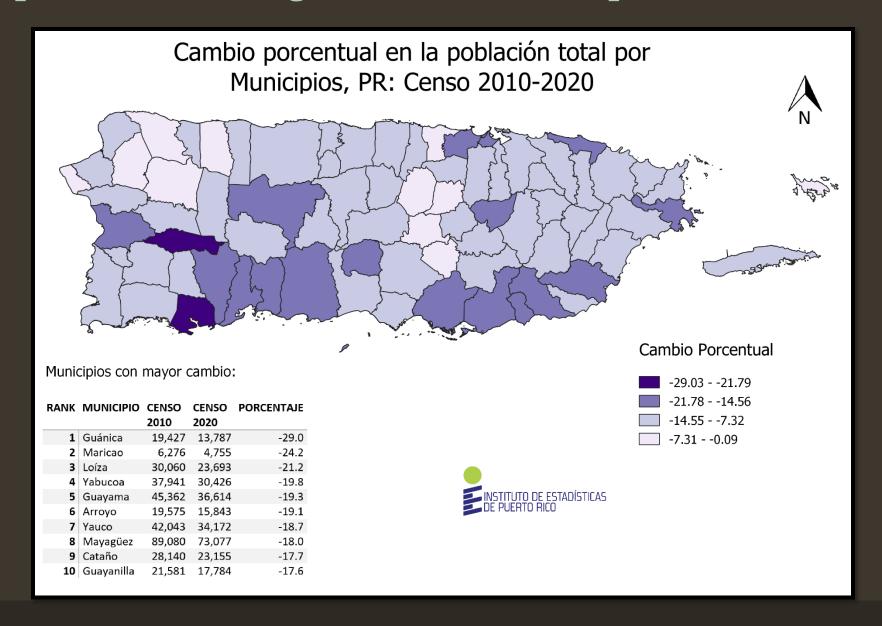
Población total en los Municipios y Puerto Rico: 2010-2020											
		Censo D	ecenal	cambio				Censo Decenal		cambio	,
Pos.		2010	2020	#	%	Pos.		2010	2020	#	%
1	Guánica	19,427	13,787	-5640	-29.0	40	Gurabo	45,369	40,622	-4747	-10.5
2	Maricao	6,276	4,755	-1521	-24.2	41	San Germán	35,527	31,879	-3648	-10.3
3	Loíza	30,060	23,693	-6367	-21.2	42	Las Marías	9,881	8,874	-1007	-10.2
4	Yabucoa	37,941	30,426	-7515	-19.8	43	Sabana Grande	25,265	22,729	-2536	-10.0
5	Guayama	45,362	36,614	-8748	-19.3	44	Toa Alta	74,066	66,852	-7214	-9.7
6	Arroyo	19,575	15,843	-3732	-19.1	45	Aguadilla	60,949	55,101	-5848	-9.6
7	Yauco	42,043	34,172	-7871	-18.7	46	Ciales	18,782	16,984	-1798	-9.6
8	Mayagüez	89,080	73,077	-16003	-18.0	47	Trujillo Alto	74,842	67,740	-7102	-9.5
9	Cataño	28,140	23,155	-4985	-17.7	48	Lajas	25,753	23,334	-2419	-9.4
10	Guayanilla	21,581	17,784	-3797	-17.6	49	Hormigueros	17,250	15,654	-1596	-9.3
11	Ponce	166,327	137,491	-28836	-17.3	50	Comerío	20,778	18,883	-1895	-9.1
12	Patillas	19,277	15,985	-3292	-17.1	51	Aguada	41,959	38,136	-3823	-9.1
13	Ceiba	13,631	11,307	-2324	-17.0	52	Las Piedras	38,675	35,180	-3495	-9.0
14	Salinas	31,078	25,789	-5289	-17.0	53	Arecibo	96,440	87,754	-8686	-9.0
15	Peñuelas	24,282	20,399	-3883	-16.0	54	Quebradillas	25,919	23,638	-2281	-8.8
16	Toa Baja	89,609	75,293	-14316	-16.0	55	Vega Baja	59,662	54,414	-5248	-8.8
17	Aguas Buenas	28,659	24,223	-4436	-15.5	56	Barceloneta	24,816	22,657	-2159	-8.7
18	Villalba	26,073	22,093	-3980	-15.3	57	Lares	30,753	28,105	-2648	-8.6
19	Utuado	33,149	28,287	-4862	-14.7	58	Orocovis	23,423	21,434	-1989	-8.5
20	Coamo	40,512	34,668	-5844	-14.4	59	Guaynabo	97,924	89,780	-8144	-8.3
21	Cayey	48,119	41,652	-6467	-13.4		Juana Díaz	50,747	46,538	-4209	-8.3
22	San Juan	395,326	342,259	-53067	-13.4	61	Hatillo	41,953	38,486	-3467	-8.3
23	Maunabo	12,225	10,589	-1636	-13.4	62	San Lorenzo	41,058	37,693	-3365	-8.2
24	Río Grande	54,304	47,060	-7244	-13.3	63	Juncos	40,290	37,012	-3278	-8.1
25	Fajardo	36,993	32,124	-4869	-13.2	64	Cidra	43,480	39,970	-3510	-8.1
26	Humacao	58,466	50,896	-7570	-12.9	65		12,680	11,692	-988	-7.8
27	Santa Isabel	23,274	20,281	-2993	-12.9	66	Adjuntas	19,483	18,020	-1463	-7.5
28	Añasco	29,261	25,596	-3665	-12.5	67	Cabo Rojo	50,917	47,158	-3759	-7.4
29	Naguabo	26,720	23,386	-3334	-12.5	68	San Sebastían	42,430	39,345	-3085	-7.3
30	Carolina	176,762	154,815	-21947	-12.4	69	Corozal	37,142	34,571	-2571	-6.9
31	Morovis	32,610	28,727	-3883	-11.9	70	Camuy	35,159	32,827	-2332	-6.6
32	Vega Alta	39,951	35,395	-4556	-11.4	71	Moca	40,109	37,460	-2649	-6.6
33	Luquillo	20,068	17,781	-2287	-11.4	72	Dorado	38,165	35,879	-2286	-6.0
34	Vieques	9,301	8,249	-1052	-11.3	73	Isabela	45,631	42,943	-2688	-5.9
35	Jayuya	16,642	14,779	-1863	-11.2	74	Aibonito	25,900	24,637	-1263	-4.9
36	Canóvanas	47,648	42,337	-5311	-11.1	75	Barranquitas	30,318	28,983	-1335	-4.4
37	Bayamón	208,116	185,187	-22929	-11.0	76	Naranjito	30,402	29,241	-1161	-3.8
38	Caguas	142,893	127,244	-15649	-11.0	77	Culebra	1,818	1,792	-26	-1.4
	Manatí	44,113	39,492	-4621	-10.5	78	Rincón	15,200	15,187	-13	-0.1
						_	Puerto Rico	3,725,789		-439,915	-11.8
						_					

Por: Instituto de Estadísticas de Puerto Rico.

Fuente: 2010 and 2020 Dennial Census (P.L. 94-171) Redistricting Data Summary Files, U.S. Census Bureau

Notas: ↑↓ Posición según el cambio porcentual de la población total (menor a mayor)

Total population change in the Municipios: 2010-2020



Change in population under and over 18 year - Puerto Rico



Population under 18 years - Municipios

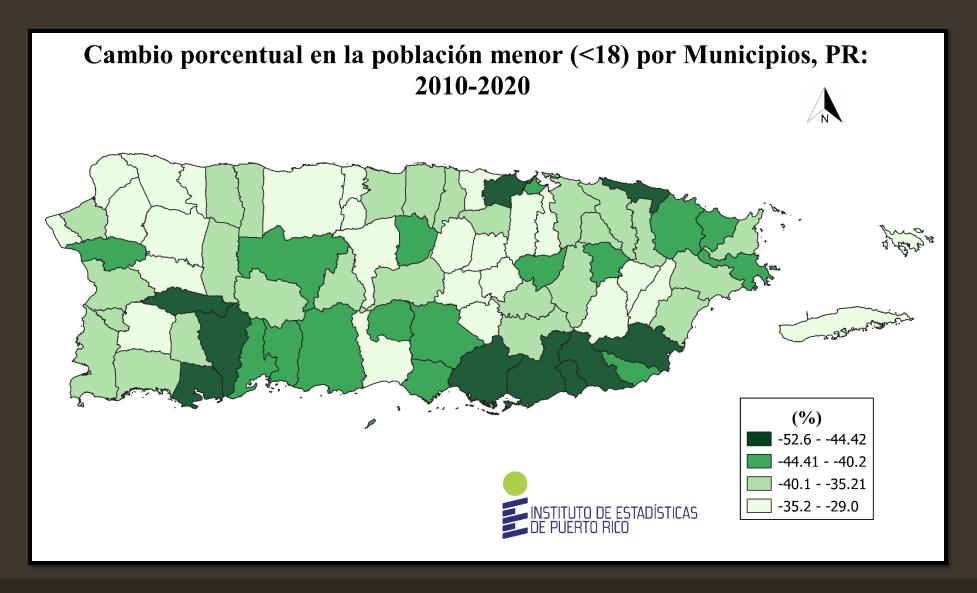
- > All the municipios showed a significant drop in their children population, (between -53% to -29%)
- ➤ Municipios' with the largest decrease (%): Guánica (53%), Yabucoa (48%), Salinas (47%) and Guayama (47%)
- ➤ Municipios' with the least decrease: Naranjito (-29%), Viegues (-29%), Aibonito (-30%) and Rincón (-32%)

		Censo Decenal		cambio				Censo De	cenal	camb	cambio	
Pos.	Municipio	2010	2020	#	%	Pos.	Municipio	2010	2020	#	%	
1	Guánica	4,786	2,267	-2,519	-52.6	40	Naguabo	7,082	4,446	-2,636	-37.2	
2	Yabucoa	9,488	4,928	-4,560	-48.1	41	San Juan	85,821	53,987	-31,834	-37.1	
3	Salinas	8,431	4,485	-3,946	-46.8	42	Lares	7,371	4,637	-2,734	-37.1	
4	Guayama	11,684	6,217	-5,467	-46.8	43	Orocovis	6,359	4,014	-2,345	-36.9	
5	Patillas	4,667	2,520	-2,147	-46.0	44	Vega Alta	10,426	6,584	-3,842	-36.9	
6	Yauco	10,132	5,485	-4,647	-45.9	45	Sabana Grande	6,233	3,937	-2,296	-36.8	
7	Maricao	1,574	854	-720	-45.7	46	Lajas	5,953	3,761	-2,192	-36.8	
8	Loíza	8,132	4,435	-3,697	-45.5	47	Cidra	10,849	6,916	-3,933	-36.3	
9	Arroyo	5,253	2,875	-2,378	-45.3	48	Adjuntas	4,999	3,214	-1,785	-35.7	
10	Toa Baja	21,829	12,132	-9,697	-44.4	49	Vega Baja	15,113	9,739	-5,374	-35.6	
11	Villalba	7,173	4,023	-3,150	-43.9	50	Hatillo	10,199	6,591	-3,608	-35.4	
12	Santa Isabel	6,765	3,819	-2,946	-43.5	51	Camuy	8,658	5,609	-3,049	-35.2	
13	Guayanilla	5,480	3,105	-2,375	-43.3	52	Cabo Rojo	11,905	7,713	-4,192	-35.2	
14	Aguas Buenas	7,185	4,118	-3,067	-42.7	53	San Lorenzo	9,982	6,472	-3,510	-35.2	
15	Cataño	7,186	4,146	-3,040	-42.3	54	Juana Díaz	13,835	8,971	-4,864	-35.2	
16	Ceiba	3,353	1,950	-1,403	-41.8	55	Quebradillas	6,390	4,144	-2,246	-35.1	
17	Ponce	40,605	23,653	-16,952	-41.7	56	Moca	10,352	6,716	-3,636	-35.1	
18	Coamo	10,795	6,297	-4,498	-41.7	57	Culebra	415	270	-145	-34.9	
19	Luquillo	5,091	2,988	-2,103	-41.3	58	Las Piedras	9,753	6,366	-3,387	-34.7	
20	Peñuelas	6,684	3,925	-2,759	-41.3	59	Arecibo	22,176	14,475	-7,701	-34.7	
21	Utuado	8,154	4,808	-3,346	-41.0	60	Florida	3,327	2,173	-1,154	-34.7	
22	Maunabo	2,954	1,744	-1,210	-41.0	61	Bayamón	46,993	30,767	-16,226	-34.5	
23	Añasco	6,999	4,138	-2,861	-40.9	62	Aguadilla	14,433	9,458	-4,975	-34.5	
24	Gurabo	11,820	7,003	-4,817	-40.8	63	Ciales	4,812	3,182	-1,630	-33.9	
25	Morovis	9,057	5,383	-3,674	-40.6	64	Corozal	9,644	6,381	-3,263	-33.8	
26	Río Grande	13,478	8,057	-5,421	-40.2	65	Las Marías	2,412	1,608	-804	-33.3	
27	Fajardo	9,260	5,632	-3,628	-39.2	66	San Germán	7,990	5,345	-2,645	-33.1	
28	Cayey	11,417	6,949	-4,468	-39.1	67	Barranquitas	8,357	5,591	-2,766	-33.1	
29	Toa Alta	20,324	12,446	-7,878	-38.8	68	San Sebastían	10,091	6,759	-3,332	-33.0	
30	Manatí	11,146	6,846	-4,300	-38.6	69	Guaynabo	21,068	14,126	-6,942	-33.0	
31	Carolina	40,703	25,027	-15,676	-38.5	70	Barceloneta	6,320	4,244	-2,076	-32.8	
32	Hormigueros	3,693	2,272	-1,421	-38.5	71	Juncos	10,695	7,197	-3,498	-32.7	
33	Canóvanas	12,719	7,831	-4,888	-38.4	72	Comerío	5,260	3,554	-1,706	-32.4	
34	Caguas	34,542	21,310	-13,232	-38.3	73	Isabela	10,873	7,351	-3,522	-32.4	
35	Humacao	13,845	8,578	-5,267	-38.0	74	Dorado	10,056	6,820	-3,236	-32.2	
36	Aguada	9,926	6,164	-3,762	-37.9	75	Rincón	3,424	2,323	-1,101	-32.2	
37	Jayuya	4,571	2,840	-1,731	-37.9	76	Aibonito	6,238	4,399	-1,839	-29.5	
38	Mayagüez	17,962	11,163	-6,799	-37.9	77	Vieques	2,196	1,556	-640	-29.1	
39	Trujillo Alto	18,815	11,797	-7,018	-37.3	78	Naranjito	7,557	5,365	-2,192	-29.0	
							Puerto Rico	903,295	560,971	-342,324	-37.9	
Por: I	nstituto de Estadíst	icas de Puerto										

Fuente: 2010 and 2020 Dennial Census (P.L. 94-171) Redistricting Data Summary Files, U.S. Census Bureau.

Notas: ↑↓ Posición según el cambio porcentual de la población 18+ (menor a mayor)

Population change under 18 years - Municipios



Population 18 years and over - Municipios

- ➤ 54 municipios had a reduction in their adult population: among -0.1% to -21.3%
- Municipios with the largest decrease (%):
 Guánica (21%), Maricao (17%),
 Mayagüez (13%) and Loíza (12%)
- ➤ On the other hand, 24 municipios showed an increase (18+) between 0.1% to 9.2%
- Municipios' with the largest increase (%):
 Rincón (9%), Culebra (9%),
 Barranquitas (7%) and Naranjito (5%)

_						_					
		Censo Decenal cambio					Censo D	Censo Decenal		cambio	
Pos	. Municipio	2010	2020	#	%	Pos.		2010	2020	#	%
1	Guánica	14,641	11,520	-3,121	-21.3	40	Sabana Grande		18,792	-240	-1.3
2	Maricao	4,702	3,901	-801	-17.0	41	Luquillo	14,977	14,793	-184	-1.2
3	Mayagüez	71,118	61,914	-9,204	-12.9	42	Comerío	15,518	15,329	-189	-1.2
4	Loíza	21,928	19,258	-2,670	-12.2	43	Canóvanas	34,929	34,506	-423	-1.2
5	Yabucoa	28,453	25,498	-2,955	-10.4	44	Ciales	13,970	13,802	-168	-1.2
6	Yauco	31,911	28,687	-3,224	-10.1	45	Lajas	19,800	19,573	-227	-1.1
7	Guayama	33,678	30,397	-3,281	-9.7	46	Jayuya	12,071	11,939	-132	-1.1
8	Arroyo	14,322	12,968	-1,354	-9.5	47	Manatí	32,967	32,646	-321	-1.0
9	Ponce	125,722	113,838	-11,884	-9.5	48	Morovis	23,553	23,344	-209	-0.9
10	Cataño	20,954	19,009	-1,945	-9.3	49	Barceloneta	18,496	18,413	-83	-0.4
11	Ceiba	10,278	9,357	-921	-9.0	50	Las Piedras	28,922	28,814	-108	-0.4
12	Guayanilla	16,101	14,679	-1,422	-8.8	51	Santa Isabel	16,509	16,462	-47	-0.3
13	Patillas	14,610	13,465	-1,145	-7.8	52	Aguada	32,033	31,972	-61	-0.2
14	San Juan	309,505	288,272	-21,233	-6.9	53	Quebradillas	19,529	19,494	-35	-0.2
15	Toa Baja	67,780	63,161	-4,619	-6.8	54	Trujillo Alto	56,027	55,943	-84	-0.1
16	Peñuelas	17,598	16,474	-1,124	-6.4	55	Gurabo	33,549	33,619	70	0.2
17	Aguas Buenas	21,474	20,105	-1,369	-6.4	56	Vega Baja	44,549	44,675	126	0.3
18	Utuado	24,995	23,479	-1,516	-6.1	57	Lares	23,382	23,468	86	0.4
19	Salinas	22,647	21,304	-1,343	-5.9	58	Hatillo	31,754	31,895	141	0.4
20	Viegues	7,105	6,693	-412	-5.8	59	San Lorenzo	31,076	31,221	145	0.5
21	Cavey	36,702	34,703	-1,999	-5.4	60	Juncos	29,595	29,815	220	0.7
22	Humacao	44,621	42,318	-2,303	-5.2	61	San Sebastían	32,339	32,586	247	0.8
23	Carolina	136,059	129,788	-6,271	-4.6	62	Cabo Rojo	39,012	39,445	433	1.1
24	Maunabo	9,271	8,845	-426	-4.6	63	Toa Alta	53,742	54,406	664	1.2
25	Coamo	29,717	28,371	-1,346	-4.5	64	Cidra	32,631	33,054	423	1.3
26	Fajardo	27,733	26,492	-1,241	-4.5	65	Juana Díaz	36,912	37,567	655	1.8
27	Río Grande	40,826	39,003	-1,823	-4.5	66	Florida	9,353	9,519	166	1.8
28	Villalba	18,900	18,070	-830	-4.4	67	Orocovis	17,064	17,420	356	2.1
29	Bayamón	161,123	154,420	-6,703	-4.2	68	Adjuntas	14,484	14,806	322	2.2
30		27,537	26,534	-1,003	-3.6	69	Isabela	34,758	35,592	834	2.4
31	Añasco	22,262	21,458	-804	-3.6	70	Corozal	27,498	28,190	692	2.5
32	Naguabo	19,638	18,940	-698	-3.6	71	Camuy	26,501	27,218	717	2.7
33	Las Marías	7,469	7,266	-203	-2.7	72	Aibonito	19,662	20,238	576	2.9
34		29,525	28,811	-714	-2.4	73	Moca	29,757	30,744	987	3.3
35	Caguas	108,351	105,934	-2,417	-2.2	74	Dorado	28,109	29,059	950	3.4
36	Aguadilla	46,516	45,643	-873	-1.9	75	Naranjito	22,845	23,876	1,031	4.5
37	Guaynabo	76,856	75,654	-1,202	-1.6	76	Barranguitas	21,961	23,392	1,431	6.5
38	Arecibo	74,264	73,279	-985	-1.3	77	Culebra	1,403	1,522	119	8.5
39		13,557	13,382	-175	-1.3	78	Rincón	11,776	12,864	1,088	9.2
33	Horningueros	10,007	10,002	1/3	1.5	′°	Puerto Rico	2,822,494	2,724,903	-97,591	-3.5
Dani.	:	d. D	- D:			_	. acres mes	2,022,134	2,72-1,500	21,001	5.5

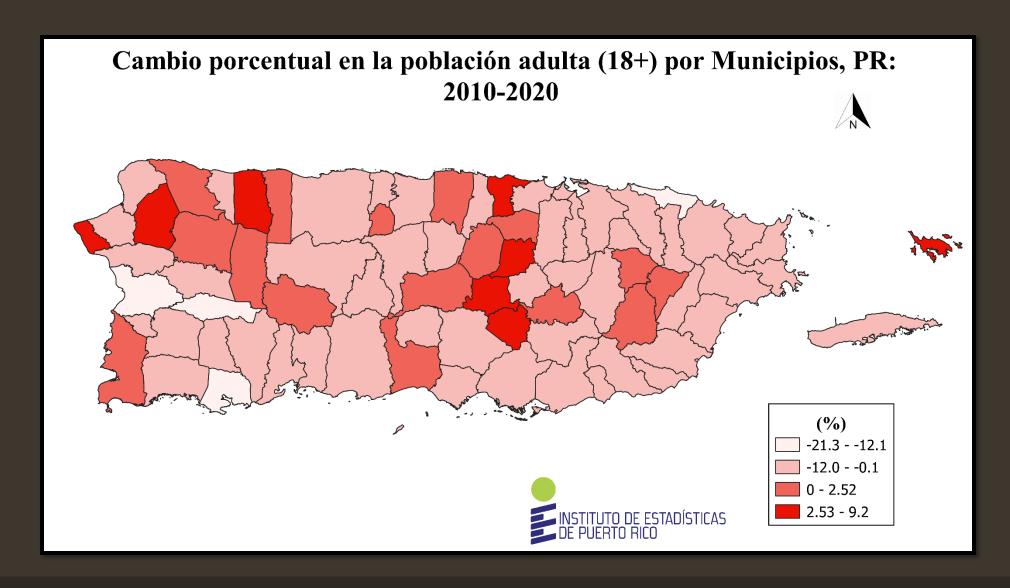
Población de 18 años o más en los Municipios y Puerto Rico: 2010-2020

Por: Instituto de Estadísticas de Puerto Rico.

Fuente: 2010 and 2020 Dennial Census (P.L. 94-171) Redistricting Data Summary Files, U.S. Census Bureau.

Notas: ↑↓ Posición según el cambio porcentual de la población 18+ (menor a mayor).

Population change 18 years and over - Municipios





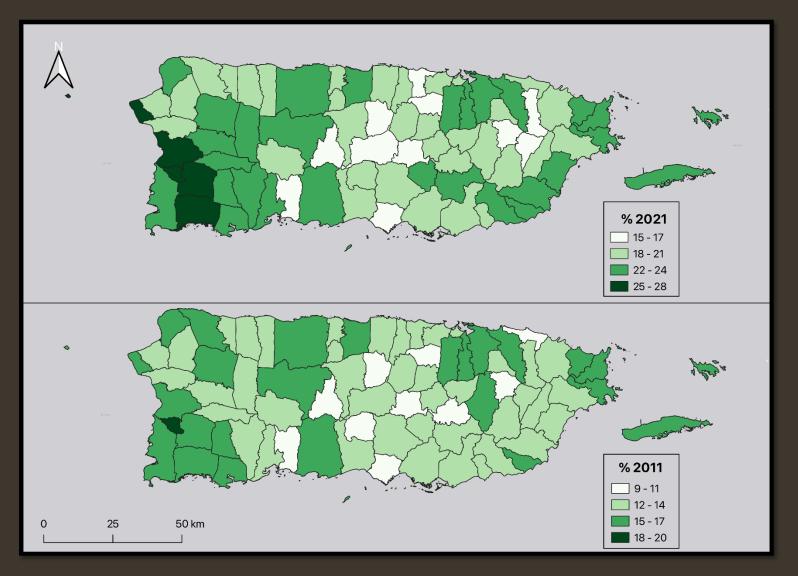
Selected community characteristics

Population change 65 years and over - Municipios

Quick transition to an elderly population

PR

- > 2021 = 21.3%
- > 2011 = 14.2%
- South-West region already has Municipios nearing 30% of the population being elderly in near future
- Planning challenges and opportunities?
- Access to health & care services?



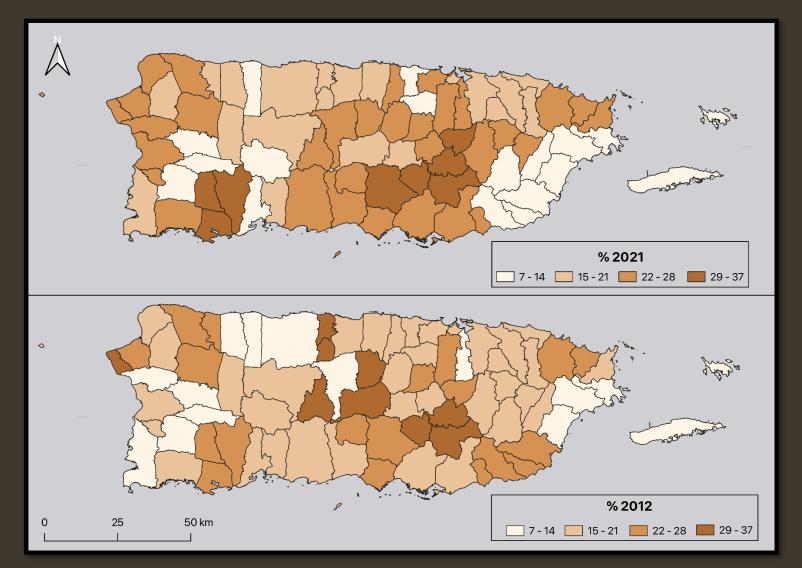


Population with disability- Municipios

2/10 persons has a disability

PR

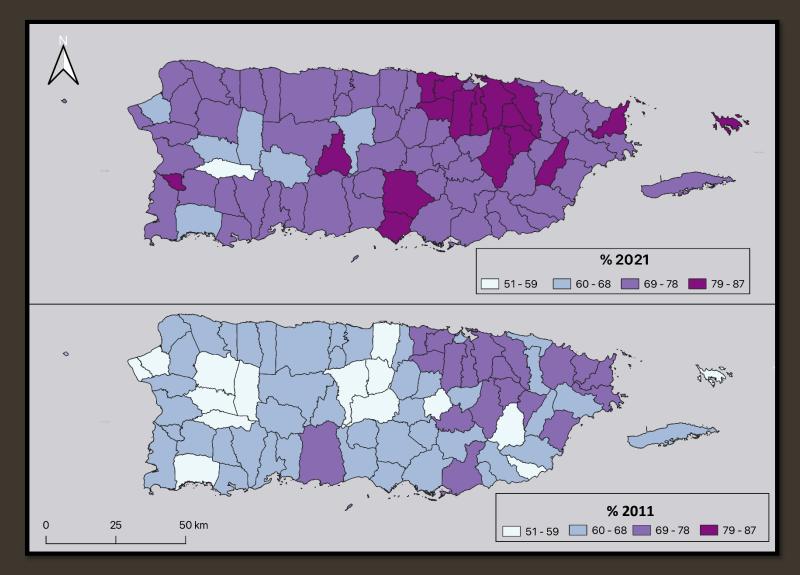
- **>** 2021 = 21.7%
- **>** 2012 = 20.8%
- What type of disability?
 - Hearing
 - Vision
 - Cognitive
 - Ambulatory
 - > Self-care
 - Independent living
- South-East region has a cluster with smaller proportions of disability





Population 25+, high school graduate or higher - Municipios

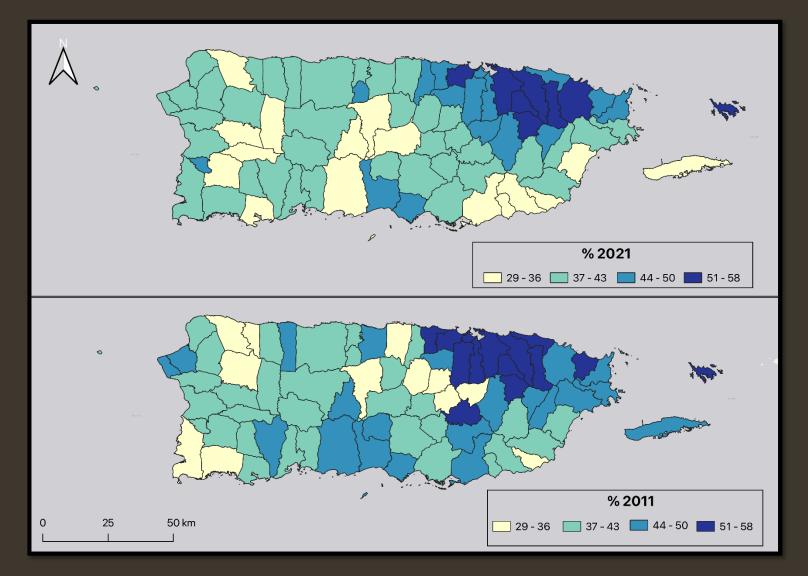
- > 8/10 persons PR
 - **2021 = 78.4%**
 - **> 2011 = 68.6%**
- Four of seven municipios' with lowest% are located in the Central-West region
- Where are we struggling?
 - Maricao
 - Las Marías
 - Lares
 - Adjuntas
 - Lajas
 - Aguada
 - Ciales





Population 16+, in labor force - Municipios

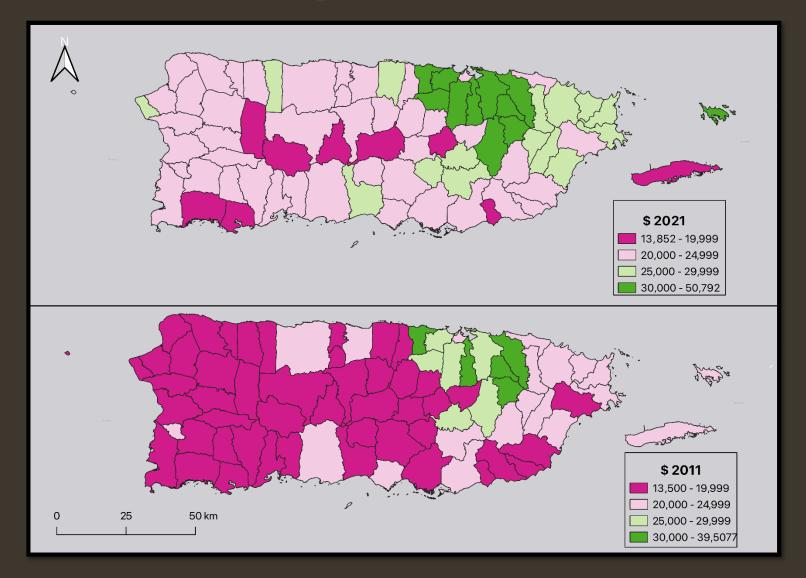
- Population 16+ of PR
 was estimated in 2.8 and
 2.9 million in 2021 and
 2011, respectively.
- > In labor force
 - **>** 2021 = 44.3%
 - **>** 2011 = 46.9%
- Labor force in South & Central regions has been greatly impacted in the last decade





Median household income - Municipios

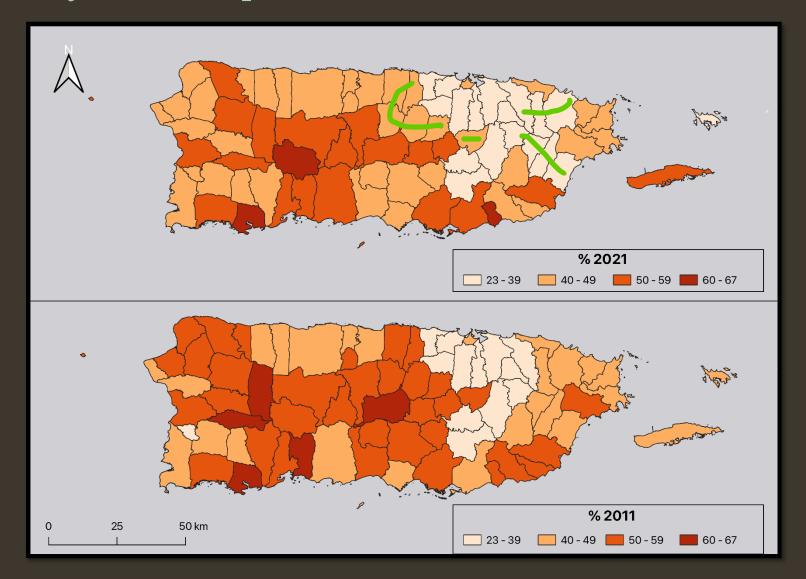
- ➢ In the last decade, the income in PR households changed by 14.4% (\$2,775)
 - > 2021 = \$ 21,967
 - **2011 = \$ 19,192**
- Muncipios' with median income less than \$20k annually in 2021:
 - Lajas
 - Guánica
 - Lares *
 - Adjuntas *
 - Jayuya *
 - Orocovis *
 - Comerío *
 - > Arroyo
 - Vieques





Population in poverty - Municipios

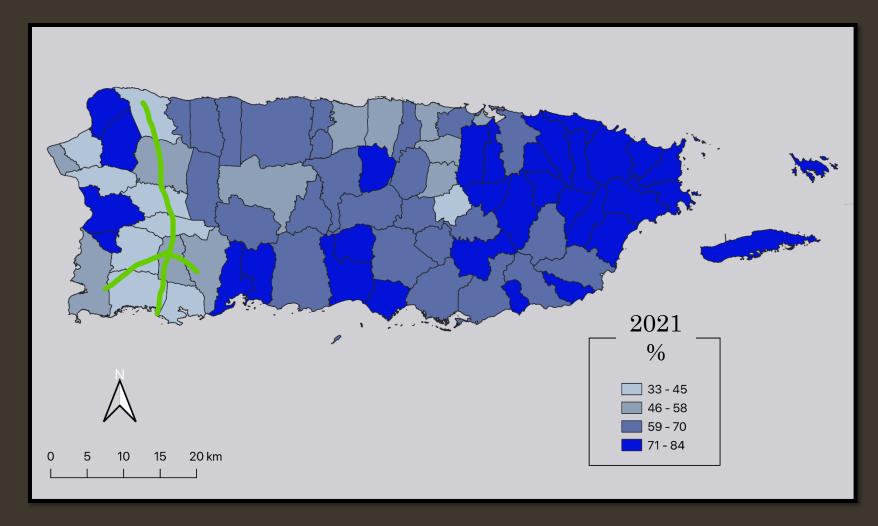
- Poverty in PR has been around 43% to 48% in the last two decades
 - **2021 = 42.7%**
 - **>** 2011 = 45.3%
 - **2000 = 48.2%**
- Some municipios' around the metropolitan region and with eastbound main roads decreased their poverty rate
- An imperious share of municipios' in the Central and Southern regions and Vieques still have half of their residents in poverty in recent years





Broadband internet subscriptions in households- Municipios

- ACS/PRCS begins to collect data regarding internet access in 2013
- PR broadband internet subscriptions has increased from 52% (2015) to 77% (2021)
- More municipios' in the Eastern region showed higher % of internet access in households
- There is a strip of
 Municipios in the
 Western region with less
 than 59% internet access

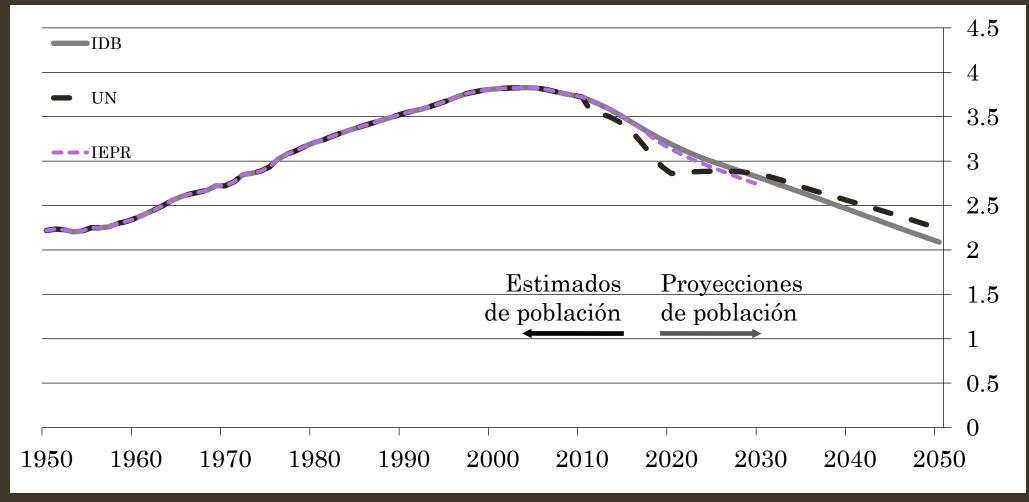






What to expect in the near future?

Total population forecast

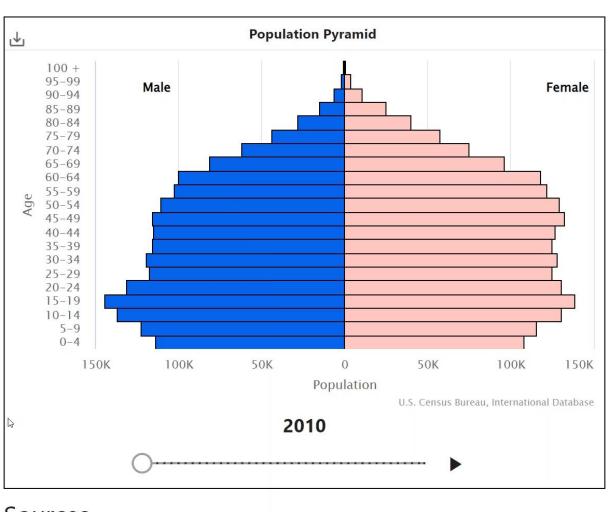






Population distribution by age and sex





Sources





- Regarding de migration flow (pull and push factors)
 - ➤ The recent decades socioeconomics non-attractive factors, combined with the hurricanes (2017) and earthquakes (2020) has been the main actors of the outmigration flow.

- > Persons' income:
 - ➤ It's not about the persons' ability to obtain income, rather its about the fact that the labor market in PR pay less compared to other jurisdictions of the US.



- > The demographics trends tell us that currently is not too important the population size, is its structure:
 - > The decrease trend will remain for the children's and youth population.
 - > The education system enrollment shrinkage will continue, but:
 - > ¿Is this an opportunity to improve the education quality?
 - > Ex: Students / Teacher
 - ➤ Higher education system is already challenged and changing to a new small market.
- > Labor force changes
 - ➤ The unbalanced demographic structure, with the decrease in the generations of children and young people in society and vice versa in the old population.

- > We are in a fast-aging pace.
- ➤ Basic services must be adapted so that they can suitably serve the older population.
- ➤ The health services both in volume and quality are changing at the same pace?
 - ➤ Health professionals with specialization handling highly prevalent diseases in long-term stages will be needed, as well of caregivers of elderly people.
 - > There will be high demand for them in the upcoming years.



Questions, comments?

Contact: <u>alberto.velazquez@estadisticas.pr</u>

Institute's Census Data and Information webpage of Puerto Rico and the Municipios (State Data Center of PR): https://censo.estadisticas.pr/ Estadísticas al Día



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