Project for Plotting to Re-Imagine Interstate Migrations Project PRISM

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The problem

Misconceptions

Dishonest actors distort perceptions of internal migration flows inside the United States to serve ideological ends. Media sources tend to fixate in anecdotes instead of hard data in order to serve convenient narratives.

Mixed Messages

- While inter-state migrations are a common, regular phenomenon in the United States, data about them tends to be a confused muddle. Laypersons will find it difficult to understand data,

Problem statement

Project PRISM aims to combat misconceptions about the complex phenomenon of internal geographic mobility in the United States.

Solution

Since data about multiple migrations is hard to understand; PRISM provides data visualizations as a prism through which to better understand them.

Graphs speak louder than numbers.

The right diagrams can allow ordinary people to have more informed opinions about this phenomenon.

Challenges

Challenge 1

Challenge 2

Challenge 3

Migration data is fragmented, imprecise, and difficult to find.

Migration data requires a large dataset to adequately address

Common diagrams are not appropriate for this kind of data.

Challenges

Challenge 4	Challenge 5	Challenge 6
Required 51 CSVs, one for each state plus Washington D.C.	**With 522 rows by 109 columns, it took considerable effort to manipulate data into useable form.**	**The index only showed the 'Origin' state, not the 'Destination' state.**

Challenges

	Total	Alabama/AL	Alaska/AK	Arizona/AZ	Arkansas/AR	California/CA	Colorado/CO	Connecticut/CT	Delaware/DE	District of Columbia/DC	...	South America, Not Specified
Age (AGEP)												
-> Total	319852	253611	429	868	859	1674	983	393	64	167	...	162
-> Total ->	319852	253611	429	868	859	1674	983	393	64	167	...	162
Total 12th grade - no diploma	7237	5807	0	4	0	63	9	99	0	0	...	0
25 years Total 12th grade - no diploma	260	191	0	0	0	0	0	0	0	0	...	0
73 years Total Doctorate degree	8	8	0	0	0	0	0	0	0	0	...	0
74 years Total Doctorate degree	10	0	0	0	0	0	10	0	0	0	...	0
75 years Total Doctorate degree	60	45	0	0	0	0	0	0	0	0	...	0

522 rows × 109 columns

Challenges

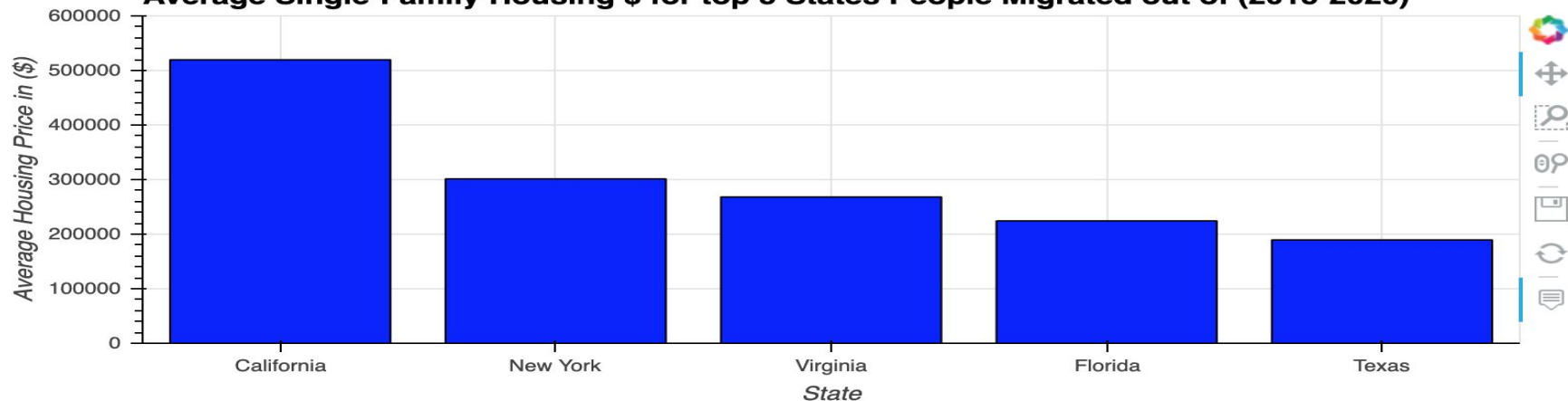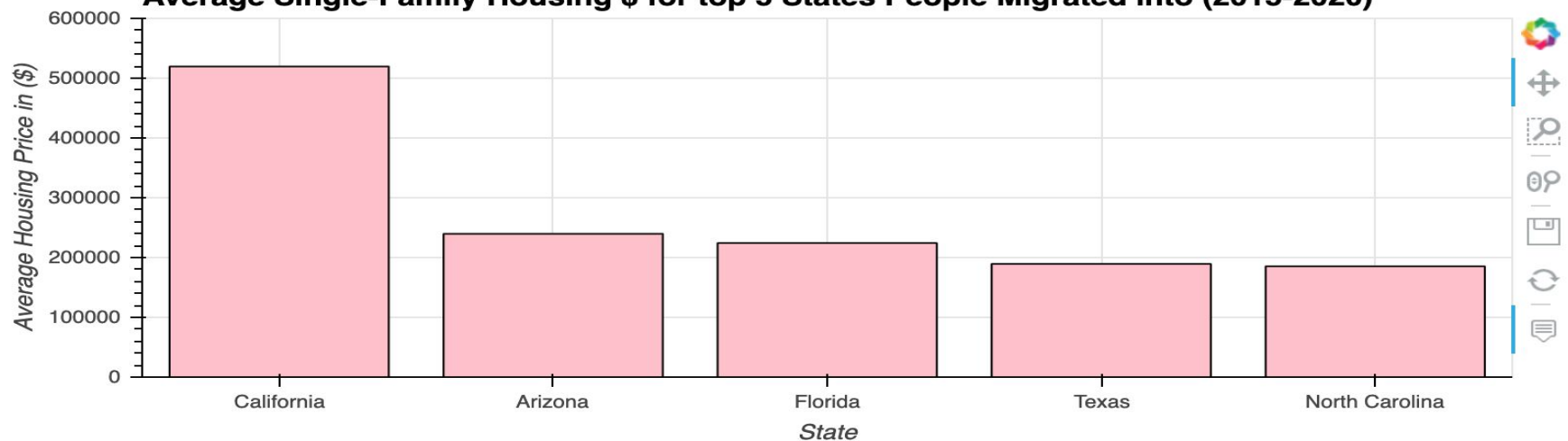| To_State	Origin	Total	Total 12th grade - no diploma	25 years Total 12th grade - no diploma	26 years Total 12th grade - no diploma	27 years Total 12th grade - no diploma	28 years Total 12th grade - no diploma	29 years Total 12th grade - no diploma	30 years Total 12th grade - no diploma	31 years Total 12th grade - no diploma	32 years Total 12th grade - no diploma	...	66 years Total Doctorate degree	67 years Total Doctorate degree	68 years Total Doctorate degree
Alaska	Alabama	227	0	0	0	0	0	0	0	0	0	...	0	0	0
Arizona	Alabama	661	9	0	0	0	0	0	0	0	0	...	0	0	0
Arkansas	Alabama	431	26	3	0	0	23	0	0	0	0	...	0	0	0
California	Alabama	2174	41	0	0	0	0	0	0	0	0	...	0	0	0
Colorado	Alabama	1463	0	0	0	0	0	0	0	0	0	...	0	0	0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vermont	Wyoming	9	0	0	0	0	0	0	0	0	0	...	0	0	0
Virginia	Wyoming	58	0	0	0	0	0	0	0	0	0	...	0	0	0
Washington	Wyoming	674	0	0	0	0	0	0	0	0	0	...	0	0	0
West Virginia	Wyoming	0	0	0	0	0	0	0	0	0	0	...	0	0	0
Wisconsin	Wyoming	353	1	0	0	0	0	0	0	0	0	...	0	0	0

2600 rows × 521 columns

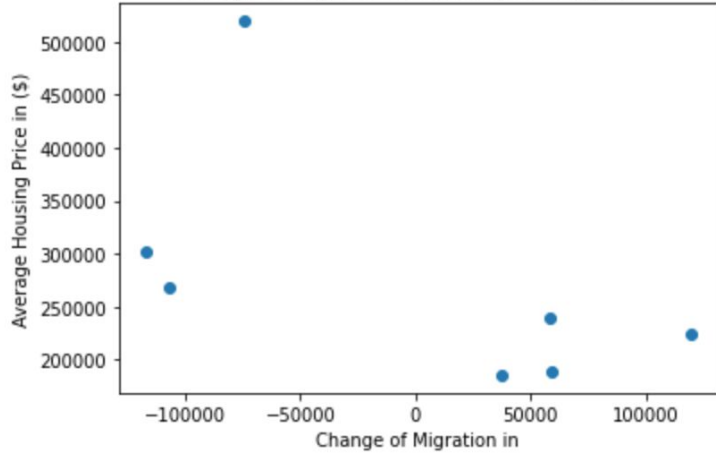**Average Single-Family Housing $ for top 5 States People Migrated out of (2015-2020)**

Y-axis: Average Housing Price in ($)
X-axis: State

California, New York, Virginia, Florida, Texas

Average Single-Family Housing $ for top 5 States People Migrated into (2015-2020)

Y-axis: Average Housing Price in ($)
X-axis: State

California, Arizona, Florida, Texas, North Carolina

state	m_in	m_out	mean_housing_price	change_out_m_in	change_in_m_out
Arizona	156164	98154	239702.0972	-58010	58010
California	294078	368821	519553.4167	74743	-74743
Texas	300470	241155	189390.4722	-59315	59315
Florida	367052	247664	224273.9028	-119388	119388
North Carolina	173980	136364	185339.6944	-37616	37616
New York	137980	255001	301285.5139	117021	-117021
Virginia	143381	250491	268088.3194	107110	-107110

Change of Inbound & Outbound Migration
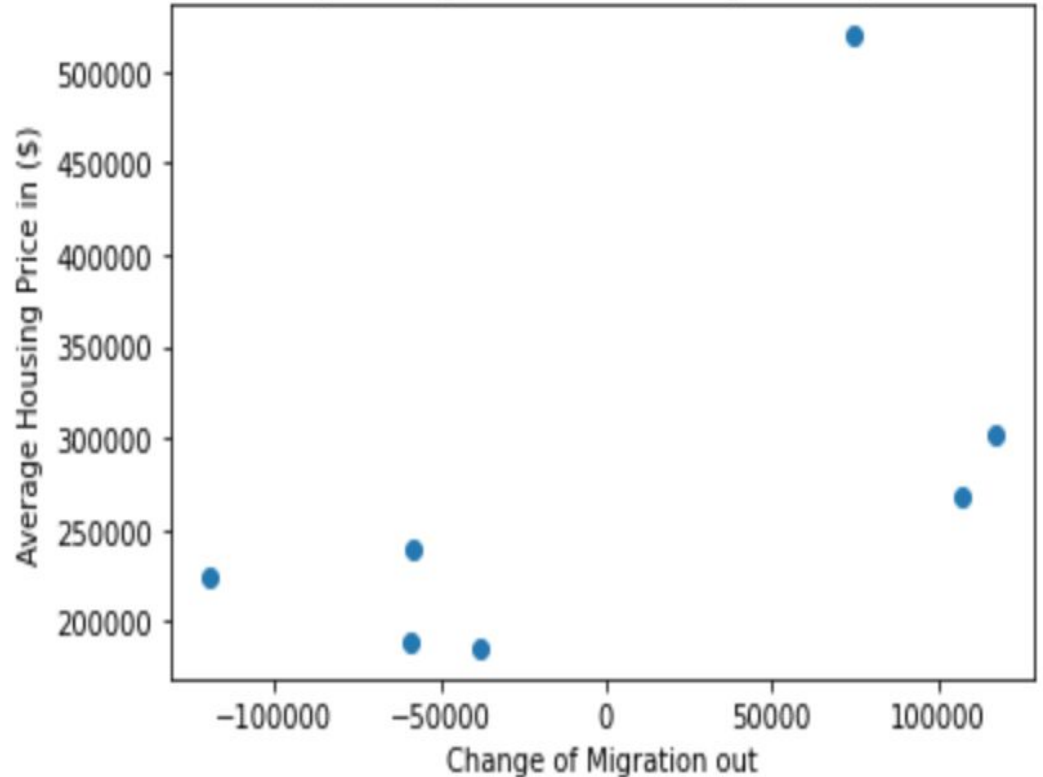
2015-2020

Top 5 States - Outbound Migration

	State	Single-Family Home Price	Income	Rent
1	Texas	189,390	67,444	1,331
2	New York	301,285	71,855	1,395
3	California	519,553	78,105	2,075
4	Virginia	268,088	81,313	1,254
5	Florida	224,273	86,368	1,450

2015-2020

Top 5 States - Inbound Migration

	State	Single-Family Home Price	Income	Rent
1	Florida	224,273	58,368	1,450
2	North Carolina	185,339	61,159	1,275
3	Texas	189,390	67,444	1,331
4	Arizona	239,702	70,674	1,190
5	California	519,553	78,105	2,075

Continue to improve web app via CSS and HTML

Add 2020 data when released by US in July.

2024: Use new ACS data to update plots and keep updating every 5 years.

| May | June | July | August | November |
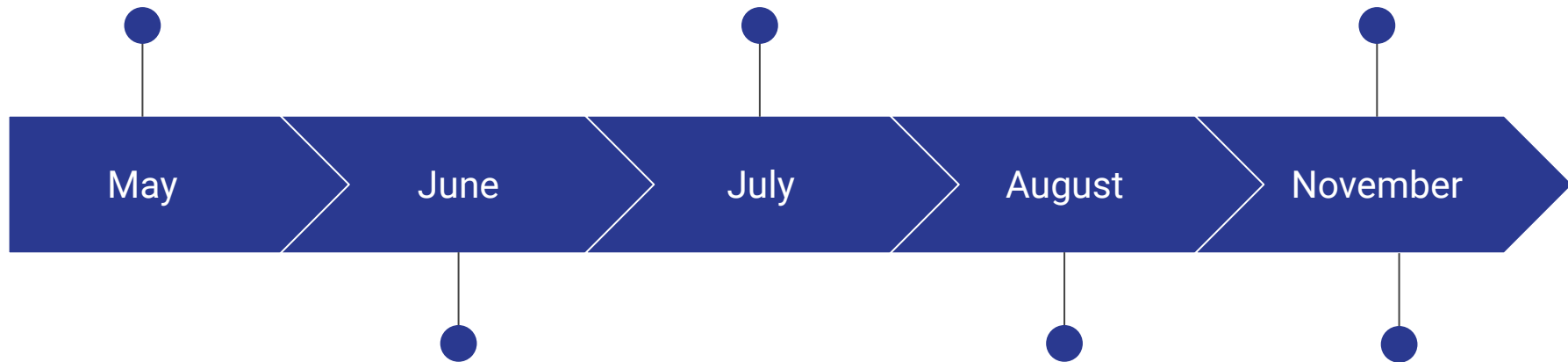
Broaden data and analysis to include all ages and education level, income tax, work industry

Alexei: Git more matches on Bumble

Git jobs but maintain team communications

Conclusion

The PRISM team invites everyone to form their own informed opinions. The goal of PRISM is to inform by making data understandable; not to interpret it for others.

We can offer explanations but deign not to impose our own conclusions.

Thank you
Shukraan lek
Spasibo
Gracias

We appreciate your attention. Please have a nice weekend; and git vaccinated. See you soon, in person.