

Washington state's immigrant population: 2010-21

By Wei Yen, Ph.D.

May 2023

Introduction

This brief presents changes in Washington's immigrant population from 2010 to 2021. We grouped the state's population in four categories: U.S.-born citizens, naturalized citizens, legal immigrants and undocumented immigrants. Our data source is the Census Bureau's American Community Survey (ACS) 1-year Public Use Microdata Sample files. Before we analyzed the ACS data, we applied an adjustment to the data to account for the underreport of Medicaid population in the ACS beginning in 2014.¹ Estimates for 2020 are not available due to data quality issues that year in the ACS because of national data collection challenges during COVID-19.²

Our main findings

- *Immigrant population has increased by 29% in Washington during 2010-21, with a larger increase in the immigrant group of naturalized citizens (37%). In 2021, the total immigrant population was 1,149,000.*
- *Shares of females in each immigrant population group remained about the same across the years, although the shares varied among the groups, between 40% and 60%.*
- *While the share of adults 18-64 declined in the U.S.-born citizen group to 58%, it remained the same in the immigrant groups (around 75% for naturalized citizen group and legal immigrant group, and 90% for the undocumented immigrant group).*
- *The share of individuals with Hispanic origin had a gradual but steady increase in the U.S.-born citizen group (8% to 12%). However, the undocumented immigrant group share declined from 54% to 39%.*
- *The shares of non-Hispanic white population declined in the U.S.-born citizen group (80% to 72%)³ and the legal immigrant group (32% to 23%).*
- *The shares of non-Hispanic Asians or Pacific Islanders increased in the legal*

¹ For more information on our adjustment to the ACS, see

https://ofm.wa.gov/sites/default/files/public/legacy/healthcare/healthcoverage/pdf/undercount_medicaid.pdf.

² For more information about data issues in the 2020 American Community Survey, see

<https://ofm.wa.gov/sites/default/files/public/dataresearch/researchbriefs/brief106.pdf>.

³ There is a strong reason to believe that large decline from 75.3% in 2019 to 71.5% in 2021 is mostly due to change in the survey question adopted in 2021 ACS. See more details in the section "Non-Hispanic white."

immigrant group (27% to 36%) and the undocumented immigrant group (27% to 43%).

- In the adult population age 18-64, all groups except the legal immigrant group had increased shares with a 4-year college degree or higher. The undocumented immigrant group had the largest change (22% to 47%).
- For all groups, shares of adults 18-64 who were employed increased to the highest point in 2019 (above 70%) and then declined in 2021.
- Shares of adults 18-64 in low-income families (less than 200% of the federal poverty level) declined in all groups, particularly in the undocumented immigrant group in which the share dropped by half (56% to 28%).

Immigrant population in 2010-21

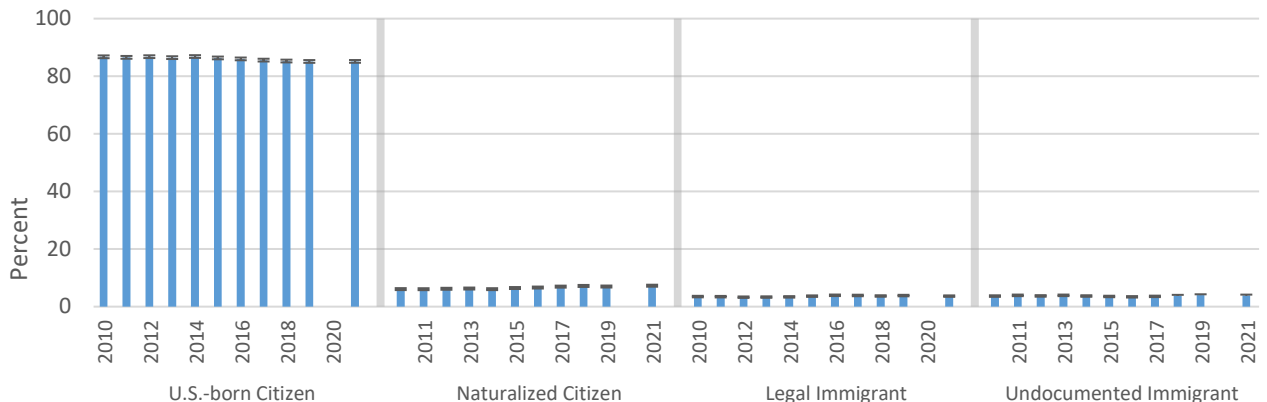
Washington’s total population increased by 15% from 2010 to 2021 (7.7 million). At the same time, U.S.-born citizen population increased by 13% and the immigrant population increased by 29%. Within the immigrant population, the naturalized citizen group had the largest increase, with 37%, while the legal immigrant group and the undocumented immigrant group increased by 20% and 23%.

U.S.-born citizens accounted for 86.7% of the total population in 2010 and 85.1% in 2021. The share of naturalized citizens increased slightly from 6.1% to 7.3%. The share of legal immigrants remained unchanged essentially, at about 3.6%. The share of undocumented immigrants also remained unchanged, at about 3.8%.

Table 1. Washington population (in thousands) by immigration status: 2010-21

Immigration status	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2010-2021 change (%)
State total population	6,744	6,830	6,897	6,971	7,062	7,170	7,288	7,406	7,536	7,615	7,739	7,739	14.7%
U.S.-born citizen	5,850	5,912	5,985	6,027	6,132	6,191	6,269	6,339	6,426	6,483	6,589	6,589	12.6%
Immigrant	894	918	912	944	930	979	1,019	1,067	1,110	1,132	1,149	1,149	28.5%
Naturalized citizen	411	414	428	439	429	464	483	515	542	532	563	563	37.0%
Legal immigrant	236	237	227	232	240	262	287	288	279	293	283	283	20.0%
Undocumented immigrant	247	268	257	274	261	254	249	264	289	307	304	304	22.6%

Figure 1. Percentage of total population by immigration status, 2010-21: Washington



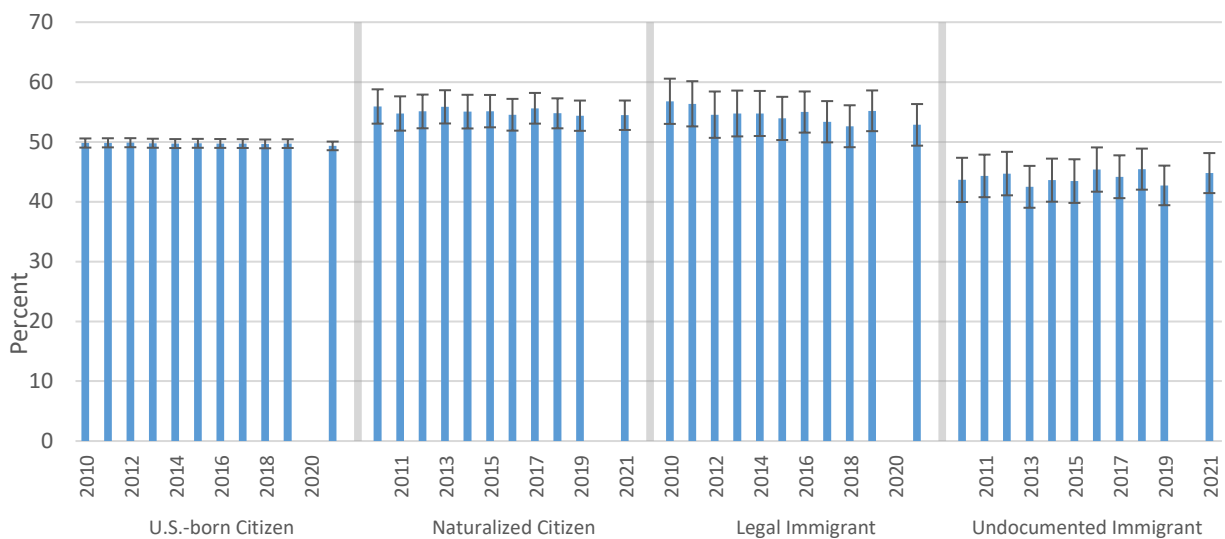
Changes in demographic characteristics, 2010-21

Sex

There were no statistically significant changes in the share of females within any of the immigrant population groups from 2010 to 2021. However, across the groups,

differences in the shares of females persisted. For example, while the share of females in the U.S.-born citizen group has been slightly below 50%, the share in the naturalized citizen group and legal immigrant groups has been higher, in the mid-50% and the share has been lower in the undocumented immigrant group, in the mid-40%.

Figure 2. Percentage of female in population groups by immigration status, 2010-21: Washington

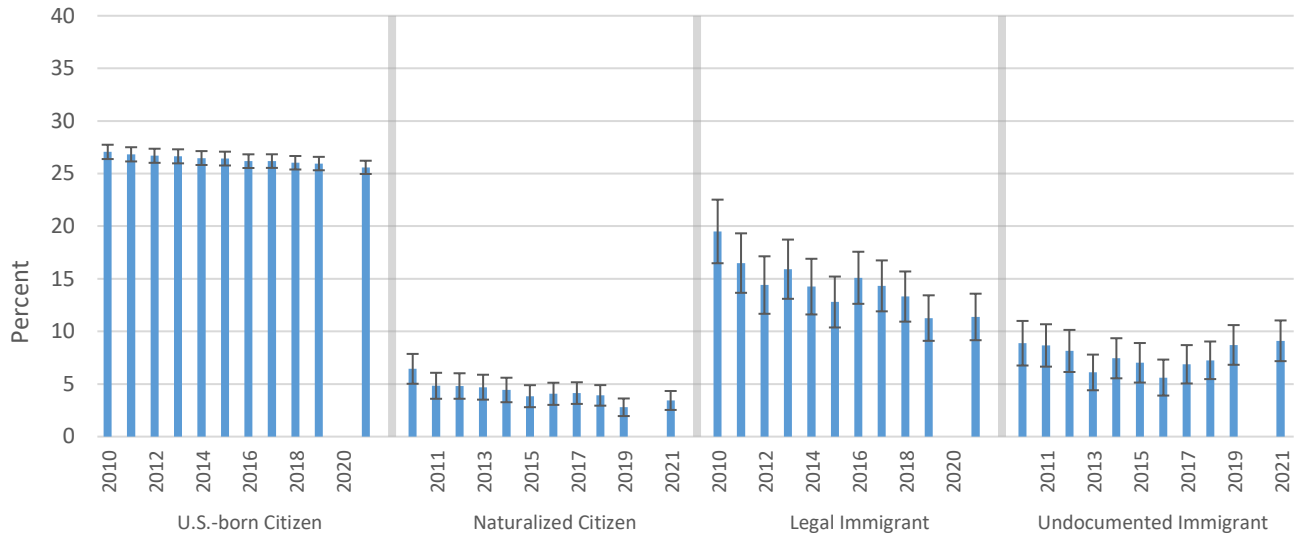


Children under 18

From 2010 to 2021, the share of children under 18 declined in the U.S.-born citizen, naturalized citizen and legal immigrant groups. In the undocumented immigrant group, the change in the share was not significant. There were, however, considerable differences across these four groups in their shares of children under 18.

The U.S.-born citizen group had the highest share, above 25%. The share was lowest in the naturalized citizen group, below 5% in all years except 2010. In the legal immigrant group, the share dropped from approximately 20% to about 11%. Finally, the share in the undocumented immigrant group remained between 5% and 10% at all times.

Figure 3. Percentage of children under 18 in population groups by immigration status, 2010-21: Washington



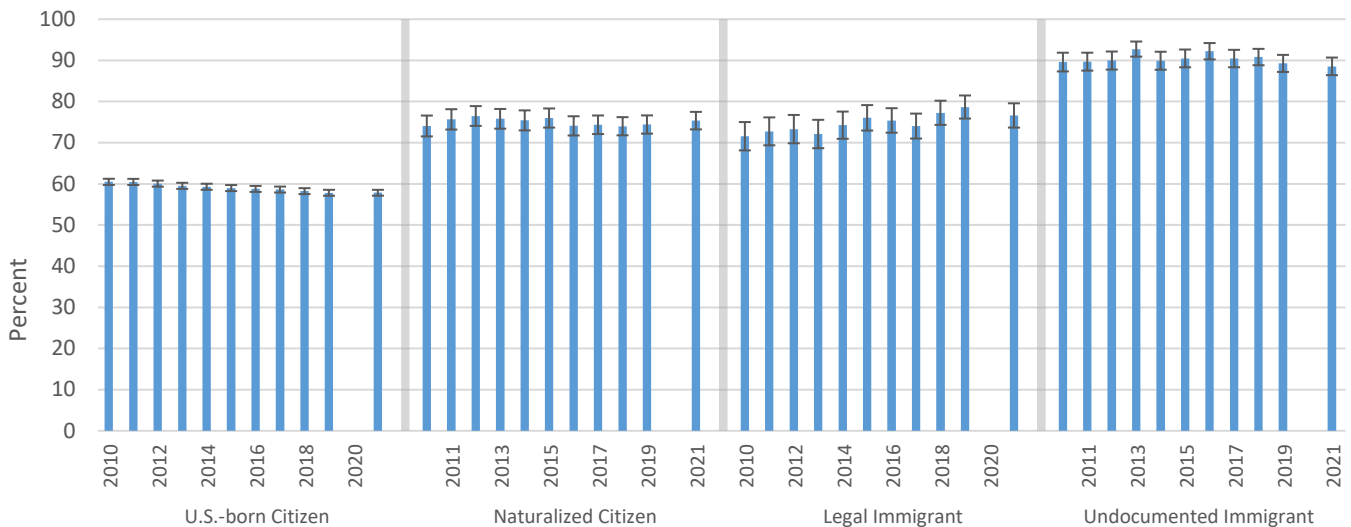
Adults 18-64

The only group that had a significant change from 2010 to 2021 in the share of adults 18-64 was the U.S.-born citizen group.

When the four groups' shares are ranked, the U.S.-born citizen group had the lowest

share, at or slightly below 60%. The undocumented immigrant group had the highest share, around 90%. For the naturalized citizen group and the legal immigrant group, their shares were similar, between 70% and 80%.

Figure 4. Percentage of adults 18-64 in population groups by immigration status, 2010-21: Washington

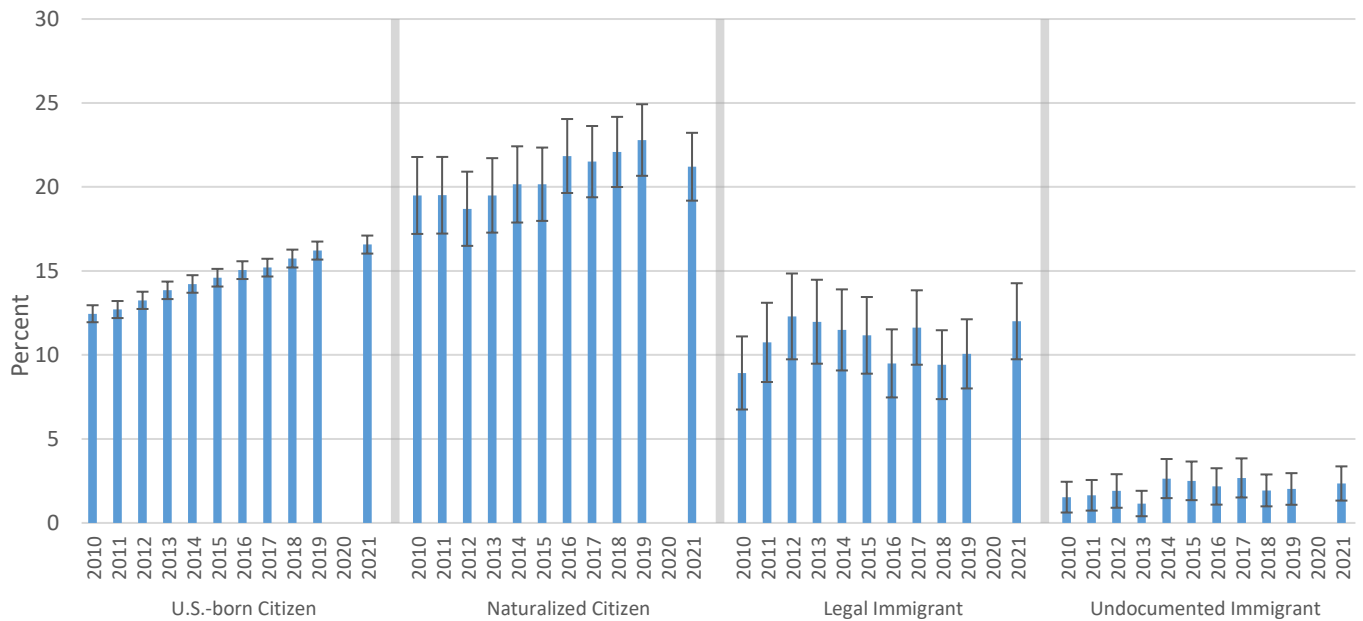


Adults 65 and older

Washington’s population has been aging over the past decade due to Baby Boomers entering the retirement age. This phenomenon manifested itself in the share of adults 65 and older in the U.S.-born citizens. This group’s increased from 12.5% in 2010 to 16.6% in 2021. In all three immigrant groups, although the share was

higher in 2021 than in 2010, the change was not statistically significant. Notable differences existed in the shares when we compared the four groups. The naturalized citizen group had the highest share, about 20%, followed by the U.S.-born citizen group (around 15%), the legal immigrant group (around 10%) and the undocumented immigrant group (around 2.5%).

Figure 5. Percentage of adults 65 and older in population groups by immigration status, 2010-21: Washington



Hispanic origin

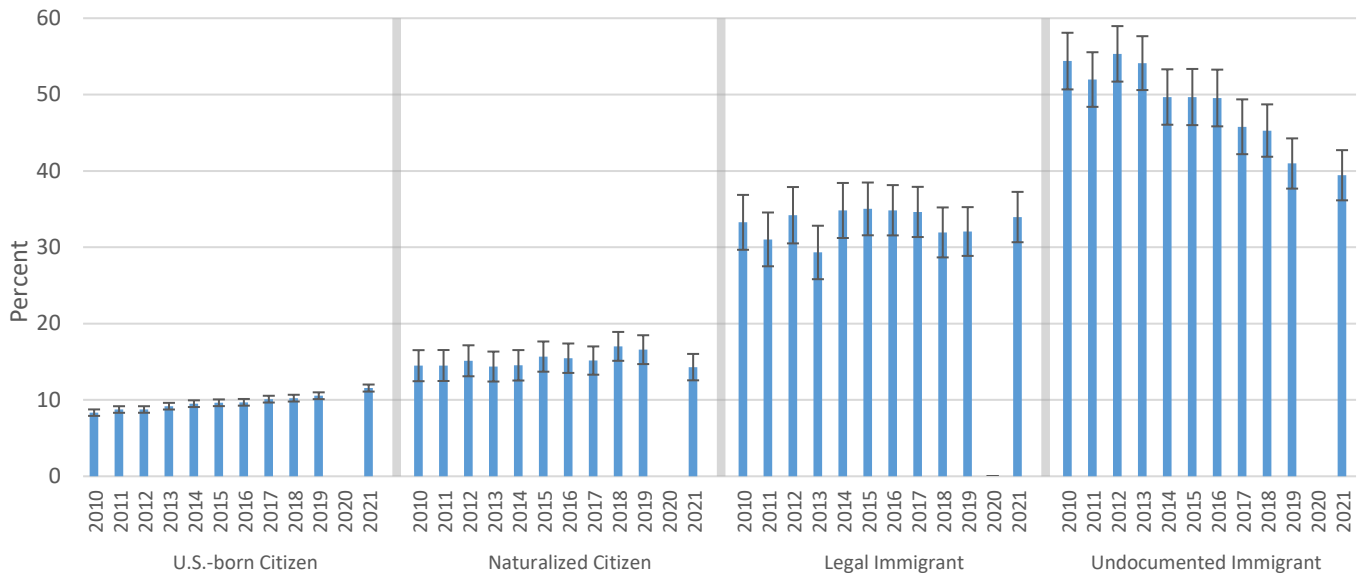
Two groups, the U.S.-born citizen group and the undocumented immigrant group, had opposite trends in their shares of people with Hispanic origin. The share in the U.S.-born citizen group rose steadily while the share in the undocumented immigrant group had an overall decline. The shares in the other two groups, naturalized citizen group and legal immigrant group, show little change over time. Despite the steady increase, the share (around 10%) in the U.S.-

born citizen was the lowest when we compared all four groups. And despite the declining trend from mid-50% to approximately 40% in the undocumented immigrant group, its share remained the highest. The second highest share, between 30% and 35%, belonged to the legal immigrant group. The naturalized citizen group had the third highest share, around 15%. Note that in the U.S.-born citizen group, the average annual change from

2010 to 2019 was an increase of approximately a quarter of a percent (0.24%). However, from 2019 to 2021, the average annual change was an increase of slightly over half of a percent (0.55%), more than twice the change in previous years.

This change from 2019 to 2021 is partially due to a change first implemented in 2020 in how the U.S. Census Bureau asked race/ethnicity questions in the American Community Survey.⁴

Figure 6. Percentage of people of Hispanic origin in population groups by immigration status, 2010-21: Washington



Non-Hispanic white

Changes in the shares of non-Hispanic white persons are notable in the U.S.-born citizen group and the legal immigrant group, with declines in both groups. Changes in the other two groups were not statistically significant. The change from 75.3% in 2019 to 71.5% in 2021 among U.S.-born citizens was particularly large for this group. However, this large change is mostly the result of the change in how the race questions were asked in the American

Community Survey.⁵ If we apply the average annual decline from 2010 to 2019 to the 2020 and 2021 ACS for Washington, we should expect the non-Hispanic white share in the U.S.-born citizen group to be approximately 74.4%. (This is true if we assume the ACS race/ethnicity questions did not change). In other words, it is reasonable to attribute a nearly 3 percentage point decline (74.4%-71.5%) in this group’s share to the change based on how the race/ethnicity questions were asked in the ACS.

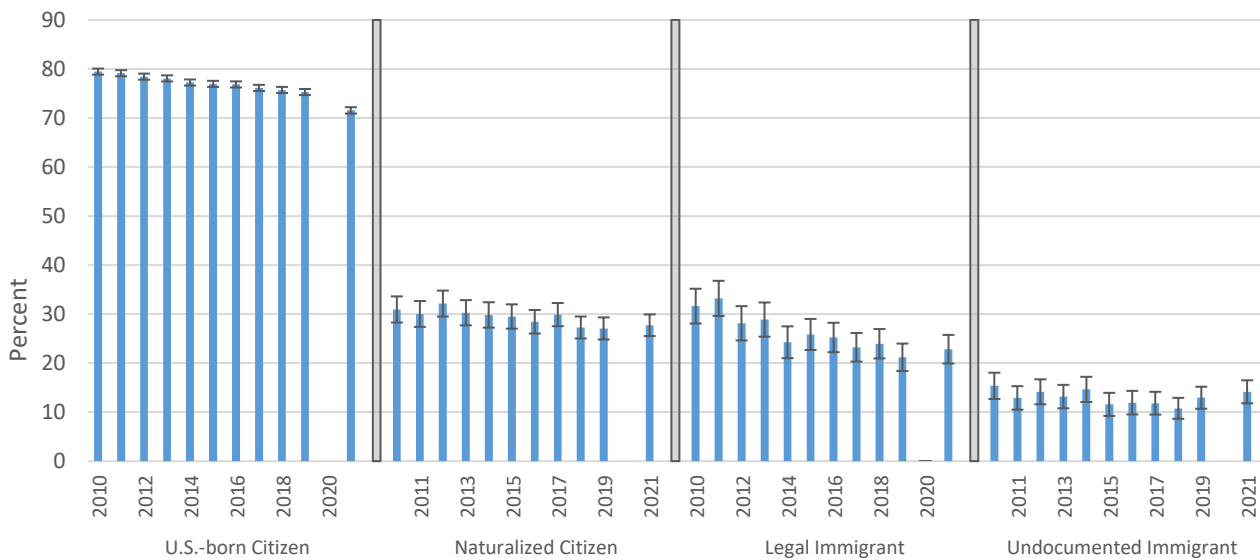
⁴ For the change in the race/ethnicity questions, see <https://www.census.gov/newsroom/blogs/random-samplings/2021/08/improvements-to-2020-census-race-hispanic-origin-question-designs.html>.

⁵ See the previous note for details about the change in the race/ethnicity questions in the ACS.

Across the four groups, there was a large variation in the share of non-Hispanic white people. The U.S.-born citizen group had the highest share. The naturalized citizen group and the legal immigrant group had the second highest shares. These two groups had shares

ranging between 20% and 35% and there was no statistical difference between these two groups in any single year. The undocumented immigrant group had the lowest share, between 11% and 15%.

Figure 7. Percentage of non-Hispanic white in population groups by immigration status, 2010-21: Washington



Non-Hispanic Asian and Pacific Islander

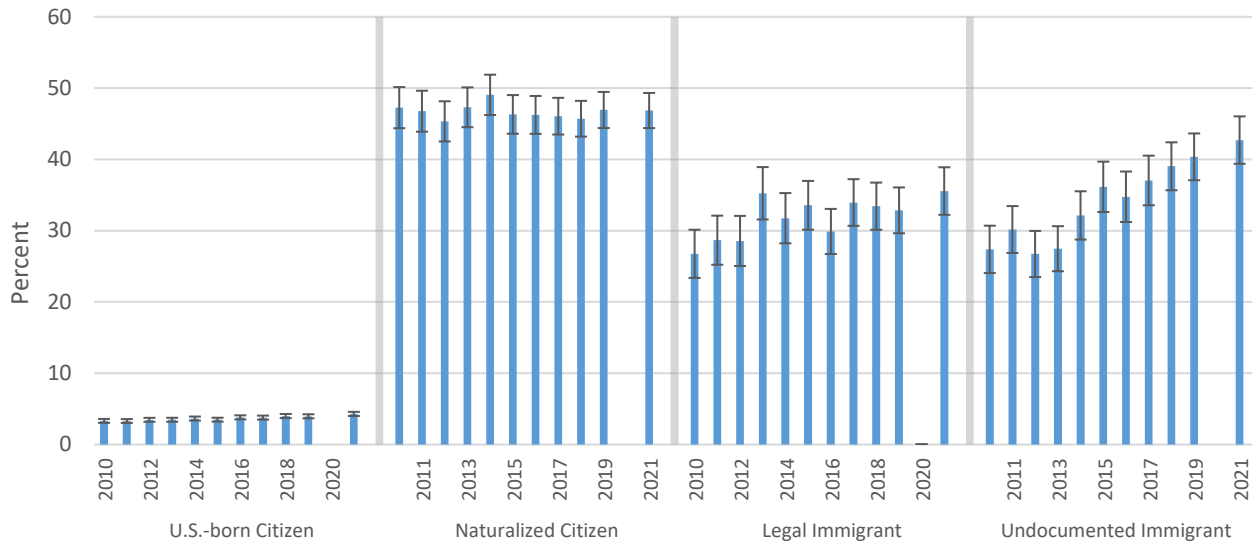
The share of non-Hispanic Asians/Pacific Islanders in the U.S.-born citizen group had a gradual and steady increase during 2010-21. However, the average annual increase in 2019-21 appeared to be much larger than any previous year-to-year increase. The larger increases in 2019-21 may be caused by the change in the ACS questions on race/ethnicity.

In the naturalized citizen group, there was no apparent change. In the legal immigrant group, there was an increase in 2013 and the share afterwards remained at the increased level. In the undocumented immigrant group,

the increase started in 2014 and continued to increase through 2021.

When compared across the four groups, the share of non-Hispanic Asian/Pacific Islander people was the highest in the naturalized citizen group (more than 40%) and the lowest in the U.S.-born citizen group (below 5%). In the remaining two groups, their shares appear to be similar (between high 20% to mid-30%), except that the share in the undocumented immigrant group appeared to have a faster increase in recent years than the share in the legal immigrant group.

Figure 8. Percentage of non-Hispanic Asian or Pacific Islander people in population groups by immigration status, 2010-21: Washington



Changes in socio-economic characteristics of adults 18-64 from 2010 to 2021

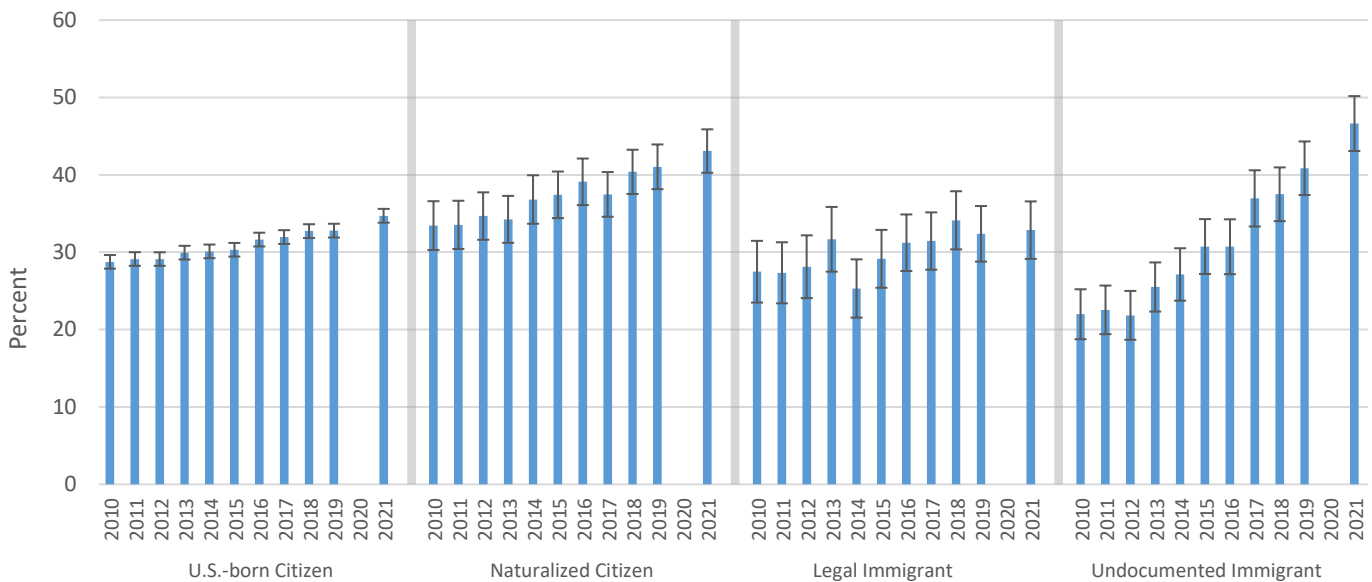
Education

The share of adults 18-64 years with a four-year college degree or higher increased in three of the four groups. The one with inconclusive trend was the legal immigrant group.

The highest share of the four groups was in the naturalized citizen group and it increased from 33% in 2010 to 43% in 2021. The undocumented immigrant group, for most of the years, had the lowest share.

However, in the last few years, this group's share had a rather fast increase, so much that it was tied statistically with the highest share in the naturalized citizen group by 2021. Over time, this group's share increased from 22% to 47%. The share in the legal immigrant group hovered around 30%, which placed the group's share between the second lowest and the lowest. The U.S.-born citizen group had a gradual yet steady increase in its share (from below 30% to 35%) and its rank among the four groups changed from the second highest to the third highest.

Figure 9. Percentage of adults aged 18-64 with a 4-year college degree or higher in population groups by immigration status, 2010-21: Washington



Employment

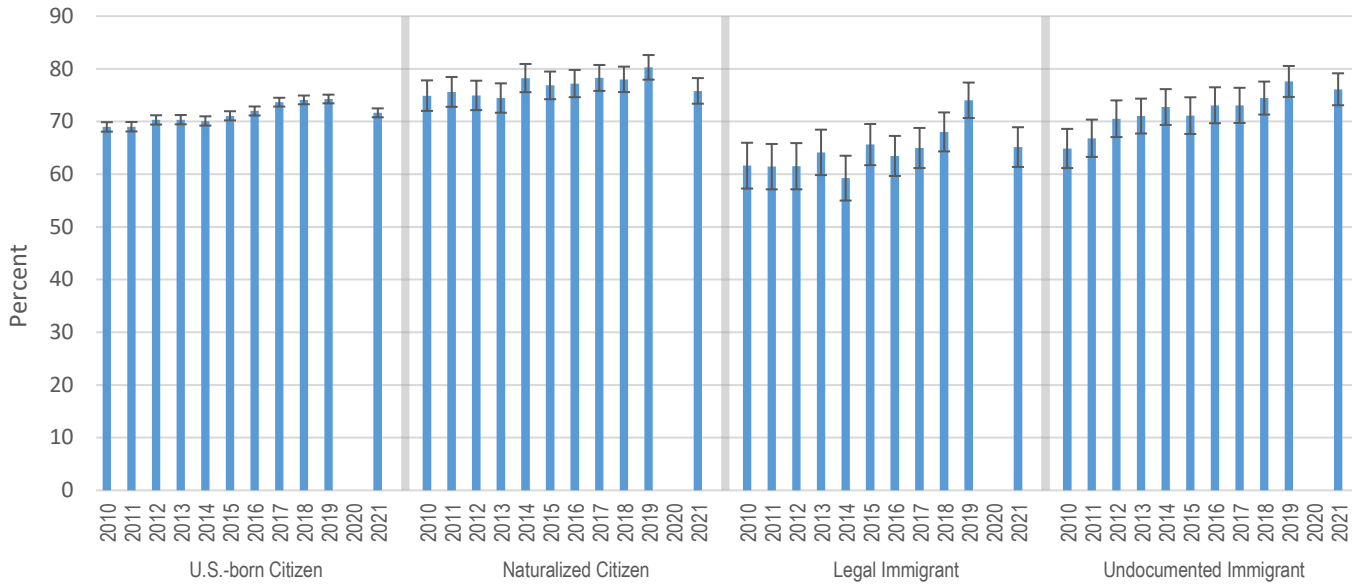
The share of adults 18-64 years who were employed in each group showed an upward trend from 2010 to 2019 and then a decline from 2019 to 2021. The decline from 2019 to 2021 can be attributed to the COVID-19 pandemic because many businesses were

recovering in 2021. For all four groups, the share of the employed was at or above 60%. However, the share in the naturalized citizen group, between 75% and 80%, was consistently the highest in all years, except in 2021. The group with the lowest share at all

times was the legal immigrant group, with a share between 60% and 75%. The share of the U.S.-born citizen group had a narrow range, between 70% and 75%, with a ranking of the second highest early on and the third highest in the last few years. The group with

the second highest share in the last few years was the undocumented immigrant group. Its share increased from 65% in 2010 to its highest point of 78% in 2019 and then dropped slightly to 76% in 2021.

Figure 10. Percentage of adults aged 18-64 who were employed in population groups by immigration status, 2010-21: Washington

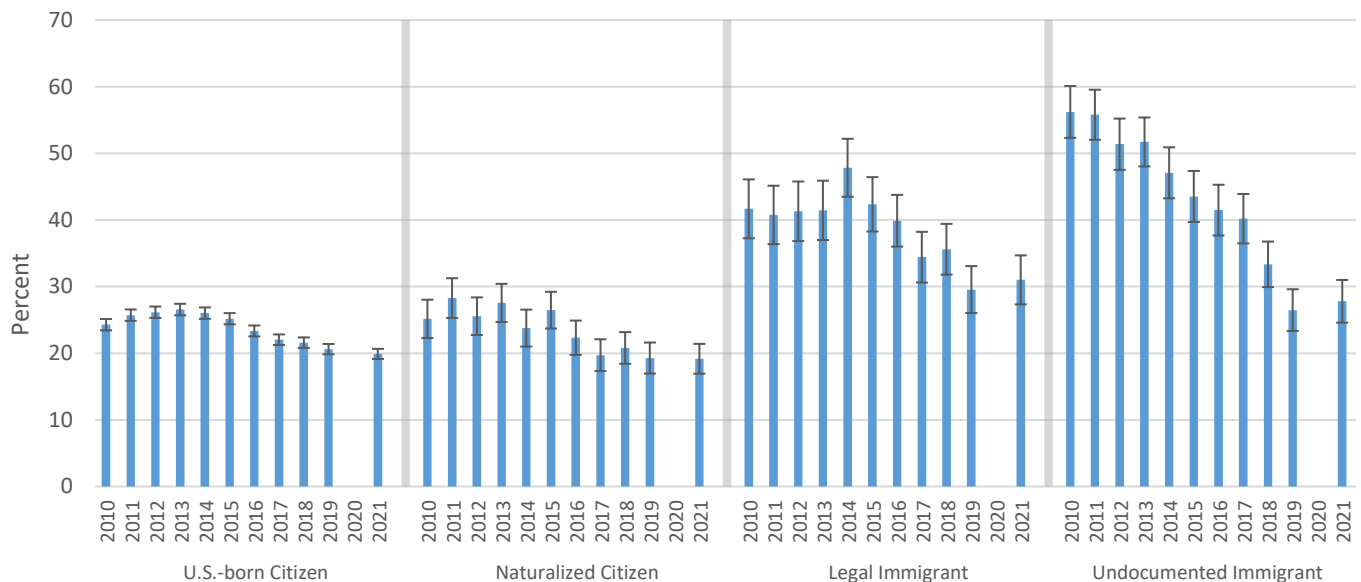


Low income (family income below 200 percent of the federal poverty level)

The share of adults 18-64 with low income dropped in all four groups from 2010 to 2021. In the legal immigrant group and the undocumented immigrant group, there was a slight increase from 2019 to 2021, but the increase was not statistically significant for either group. The shares in the U.S.-born citizen group and the naturalized citizen

group were quite similar, dropping from high 20% to about 20%. Their shares were much lower than the shares in the other two groups, especially in earlier years. The undocumented immigrant group had the highest share in earlier years, at about 50%. However, in the last two years, its share dropped to a level similar to that of the legal immigrant group, below 30%.

Figure 11. Percentage with low family income (less than 200% of federal poverty level), adults aged 18-64 by immigration status, 2010-21: Washington



Evolving demographic and socio-economic characteristics of the undocumented immigrants

Changes in the demographic and socio-economic characteristics of the undocumented immigrants are worth mention. In many cases, this group’s changes were the most dramatic change during 2010-21. In the early years of this period, the undocumented immigrants were nearly all in the age range of 18-64, mostly male, individuals of Hispanic origin, non-white, and non-Asian/Pacific Islander. For those in the age range of 18-64, few had a 4-year college degree and beyond and most were in low-income, though the majority of them were employed.

By the end of this period, although undocumented immigrants continued to be nearly all in the 18-64 age range, mostly male and non-white, most of them were now no longer of Hispanic origin. For those

in the age range of 18-64, their share of having a 4-year college degree and beyond was approaching 50% and was the highest of all groups in 2021. The proportion with low-income dropped by half, the largest decline of all groups. Their share of being employed increased further and it was tied with the highest share.

We did not attempt to determine the cause(s) for the changes in the characteristics of the undocumented immigrant population because doing so requires data we do not have and also requires a more complex analysis. However, the higher employment share, the dramatic increase in the share holding a 4-year college degree and beyond, and the dramatic decrease in the share of low-income people appear to suggest that current undocumented immigrants were more likely to be here on expired temporary documents (e.g., student visa and temporary work visa) than in earlier years.

Data source and notes

Data source

The original data source for this research brief is the US Census Bureau's American Community Survey (ACS) 1-year Public Use Microdata Sample files for 2010 to 2019 and 2021. The Health Care Research Center at the Office of Financial Management adjusted the ACS sample weights to correct the undercount of Medicaid enrollment found in ACS beginning in 2014.⁶ This adjustment may have resulted in minor changes in estimates besides counts of Medicaid enrollment. We based estimates reported in this brief for 2014-20 and 2021 on the adjusted ACS data.

Immigrant status

This brief classifies Washington's population into four groups according to their immigration statuses: U.S.-born citizen, naturalized citizen, legal immigrant and undocumented immigrant. U.S.-born citizen and naturalized citizen are determined by the citizenship and nativity data fields in the ACS. If a person is a citizen and was born native, that person is classified as U.S.-born citizen. A citizen reported to be a foreign-born is classified as a naturalized citizen. The remainder of the population are non-citizens. The ACS does not have direct data fields that can be used to classify a non-citizen as either legal immigrant or undocumented immigrant. To help make

that distinction, we applied an algorithm published in the journal of Labor Economics by George Jo. Borjas to the ACS data.⁷ The Borjas algorithm uses existing information in federal surveys such as the Current Population Survey and the ACS to impute a non-citizen's legal status. Such information includes their arrival in U.S. before 1980, participation in public assistance programs, employment in government positions, veteran or person currently in armed forces, etc. Surveys may have sampling and response errors that may result in under-report of non-citizens, probably more so of undocumented immigrants. Estimates of the non-citizen populations in this brief may contain those errors. In addition, there may be an over-report of naturalized citizens in this brief since people born outside the U.S. but to parents who are U.S. citizens are classified as "naturalized citizens" in the brief's analysis.

Missing income

The ACS data include a small number of records that have no income information. We excluded those records when we calculated the percentage of population in low income.

Statistical difference between estimates

The difference between two estimates is considered statistically significant if their 95% confidence intervals of the two estimates do not overlap.

⁶ See footnote 1.

⁷ Borjas, GJ. The Labor supply of undocumented immigrants. *Labor Economics* 46(2017):1-13.

Appendixes

Table A1. Total population by immigration status (in percentage), Washington, 2010-19 and 2021

Immigration status	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21
U.S.-born citizen	86.7	86.6	86.8	86.5	86.8	86.3	86.0	85.6	85.3	85.1		85.1
Naturalized citizen	6.1	6.1	6.2	6.3	6.1	6.5	6.6	7.0	7.2	7.0		7.3
Legal immigrant	3.5	3.5	3.3	3.3	3.4	3.6	3.9	3.9	3.7	3.9		3.7
Undocumented immigrant	3.7	3.9	3.7	3.9	3.7	3.5	3.4	3.6	3.8	4.0		3.9
Total population	100	100	100	100	100	100	100	100	100	100		100

Table A2. Demographic characteristics by Immigration status (in percentage), total population, Washington, 2010-19 and 2021

Characteristic	Immigration Status	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21
Female	U.S.-born citizen	49.8	49.8	49.9	49.8	49.7	49.8	49.7	49.7	49.7	49.7		49.3
	Naturalized citizen	55.9	54.7	55.1	55.8	55.1	55.1	54.5	55.6	54.8	54.4		54.4
	Legal immigrant	56.8	56.4	54.5	54.7	54.7	53.9	55.0	53.4	52.6	55.2		52.8
	Undocumented immigrant	43.6	44.3	44.7	42.5	43.6	43.4	45.4	44.2	45.4	42.7		44.8
Age 0-17	U.S.-born citizen	27.1	26.8	26.7	26.6	26.5	26.4	26.2	26.2	26.0	26.0		25.6
	Naturalized citizen	6.4	4.8	4.8	4.7	4.4	3.8	4.1	4.1	3.9	2.8		3.4
	Legal immigrant	19.5	16.5	14.4	15.9	14.3	12.8	15.1	14.3	13.3	11.3		11.4
	Undocumented immigrant	8.9	8.7	8.1	6.1	7.4	7.0	5.6	6.9	7.3	8.7		9.1
Age 18-64	U.S.-born citizen	60.5	60.5	60.1	59.5	59.3	59.0	58.8	58.6	58.2	57.8		57.8
	Naturalized citizen	74.1	75.7	76.5	75.8	75.4	76.0	74.1	74.4	74.0	74.4		75.4
	Legal immigrant	71.6	72.8	73.3	72.1	74.3	76.0	75.4	74.0	77.3	78.7		76.6
	Undocumented immigrant	89.6	89.7	90.0	92.7	89.9	90.5	92.2	90.4	90.8	89.3		88.5
Age 65 and older	U.S.-born citizen	12.5	12.7	13.3	13.8	14.2	14.6	15.0	15.2	15.7	16.2		16.6
	Naturalized citizen	19.5	19.5	18.7	19.5	20.2	20.2	21.8	21.5	22.1	22.8		21.2
	Legal immigrant	8.9	10.7	12.3	12.0	11.5	11.2	9.5	11.6	9.4	10.1		12.0
	Undocumented immigrant	1.5	1.6	1.9	1.2	2.6	2.5	2.2	2.7	1.9	2.0		2.3
Hispanic	U.S.-born citizen	8.3	8.7	8.7	9.2	9.5	9.6	9.7	10.1	10.2	10.5		11.6
	Naturalized citizen	14.5	14.5	15.1	14.4	14.5	15.7	15.5	15.2	17.0	16.6		14.3
	Legal immigrant	33.3	31.0	34.2	29.3	34.8	35.0	34.8	34.6	31.9	32.1		34.0
	Undocumented immigrant	54.4	52.0	55.3	54.1	49.7	49.7	49.5	45.8	45.3	41.0		39.4
Non-Hispanic white	U.S.-born citizen	79.5	79.1	78.4	78.1	77.2	77.0	76.8	76.1	75.7	75.3		71.5
	Naturalized citizen	30.9	30.0	32.1	30.3	29.8	29.5	28.4	29.9	27.3	27.1		27.7
	Legal immigrant	31.6	33.2	28.1	28.9	24.3	25.8	25.2	23.2	24.0	21.2		22.8
	Undocumented immigrant	15.4	12.9	14.1	13.2	14.6	11.6	11.9	11.8	10.8	12.9		14.1
Non-Hispanic Asian and Pacific Islander	U.S.-born citizen	3.3	3.3	3.5	3.5	3.6	3.5	3.8	3.8	4.0	4.0		4.3
	Naturalized citizen	47.3	46.8	45.3	47.3	49.1	46.3	46.2	46.1	45.7	46.9		46.9
	Legal immigrant	26.8	28.7	28.6	35.2	31.8	33.6	29.9	34.0	33.4	32.9		35.6
	Undocumented immigrant	27.4	30.2	26.7	27.5	32.1	36.2	34.8	37.0	39.0	40.4		42.7

Table A3. Education, employment and income by immigration status (in percentage): adults 18-64, 2010-19 and 2021

Characteristic	Immigration status	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21
4-year college education or higher	U.S.-born citizen	28.8	29.1	29.1	29.9	30.1	30.3	31.6	32.0	32.7	32.8		34.7
	Naturalized citizen	33.4	33.5	34.7	34.2	36.8	37.4	39.1	37.5	40.4	41.0		43.1
	Legal immigrant	27.5	27.3	28.1	31.7	25.3	29.1	31.2	31.4	34.1	32.4		32.9
	Undocumented immigrant	22.0	22.6	21.8	25.5	27.1	30.7	30.7	37.0	37.5	40.9		46.6
Employed	U.S.-born citizen	69.0	69.0	70.3	70.4	70.1	71.1	72.0	73.7	74.1	74.3		71.7
	Naturalized citizen	74.9	75.6	75.0	74.5	78.2	76.9	77.2	78.3	78.0	80.3		75.8
	Legal immigrant	61.6	61.4	61.5	64.1	59.3	65.6	63.5	65.0	68.0	74.0		65.1
	Undocumented immigrant	64.9	66.8	70.5	71.0	72.8	71.1	73.1	73.1	74.5	77.6		76.1
Low-income (below 200% of FPL)	U.S.-born citizen	24.3	25.7	26.2	26.6	26.0	25.2	23.3	22.0	21.6	20.6		19.9
	Naturalized citizen	25.2	28.3	25.6	27.6	23.8	26.5	22.3	19.7	20.8	19.3		19.2
	Legal immigrant	41.7	40.8	41.3	41.4	47.8	42.4	39.9	34.4	35.6	29.6		31.0
	Undocumented immigrant	56.2	55.8	51.4	51.7	47.1	43.5	41.5	40.2	33.3	26.5		27.8