

Demographics and Migration of Colorado Income Tax Filers

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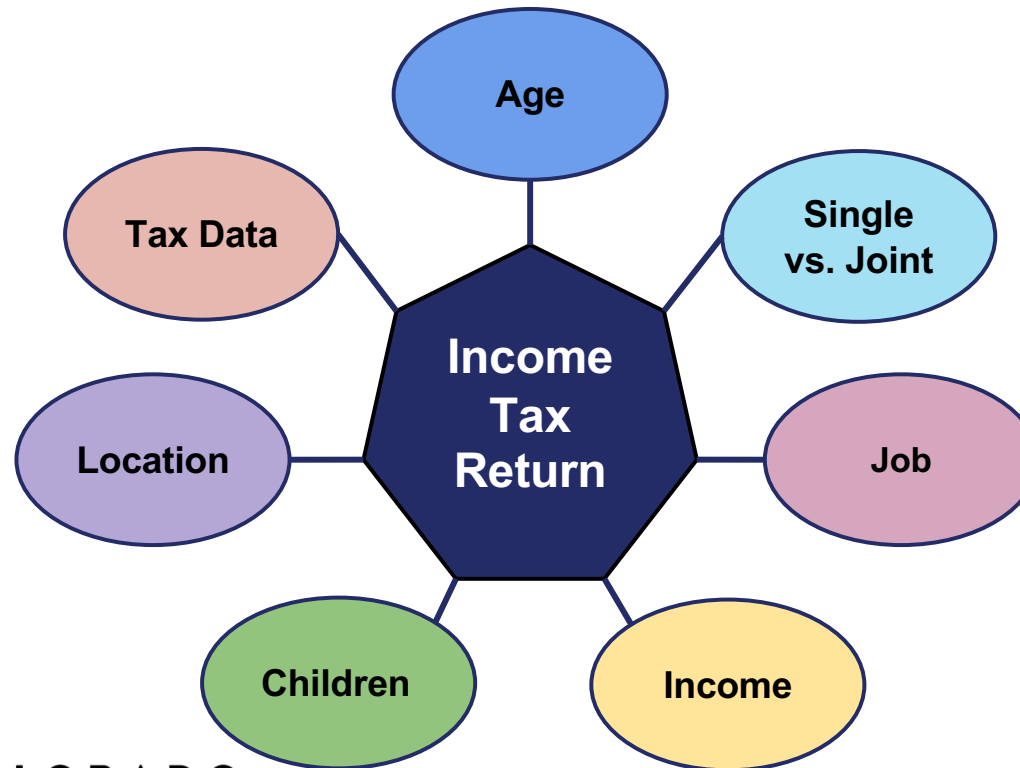
Office of Research and Analysis, Taxation Division, CDOR

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<https://cdor.colorado.gov/data-and-reports>

Overview



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Outline

- Methodology
- Total filers vs. total population
- Migration at state, region, and county levels
- Age and income trends
- Relationship between income & housing prices
- How could you use this data
- Key takeaways

Methodology

What we did:

- Pulled return-level data by tax year for two consecutive years
- Split joint return data → one record per filer (individual)
- Matched records from year 1 and year 2 on filer ID
- Attributed age and income to the tax year
- Assumed returns were filed the year after the tax year
- Determined filer location at the time of filing using addresses on returns
- Compared filer locations from one year to the next to determine migration

How we did it: GenTax; SQL code; Excel



Total Filers < Total Population

Total 2020 Population: 5,782,914 (*Colorado State Demography Office*)

Total Tax Year 2020 Filers: 3,714,181 (64%)

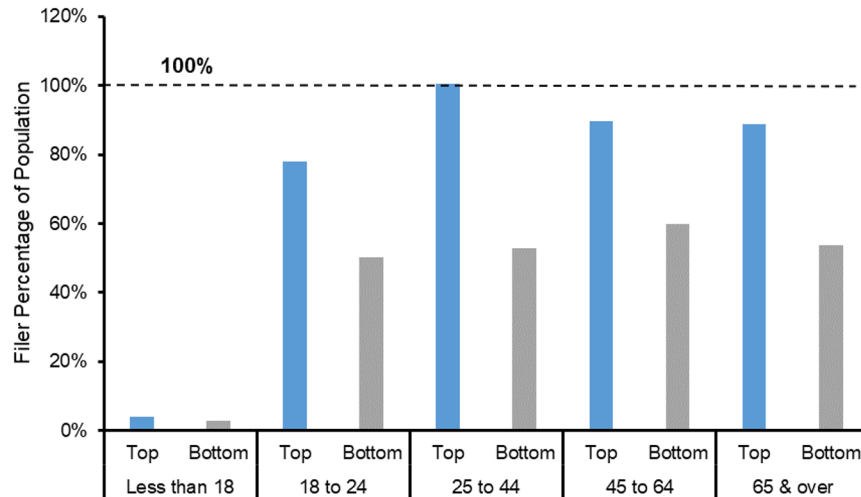
Filer counts exclude:

- Dependents without income
- Some low income earners
- Non-filers
- People with unclear addresses

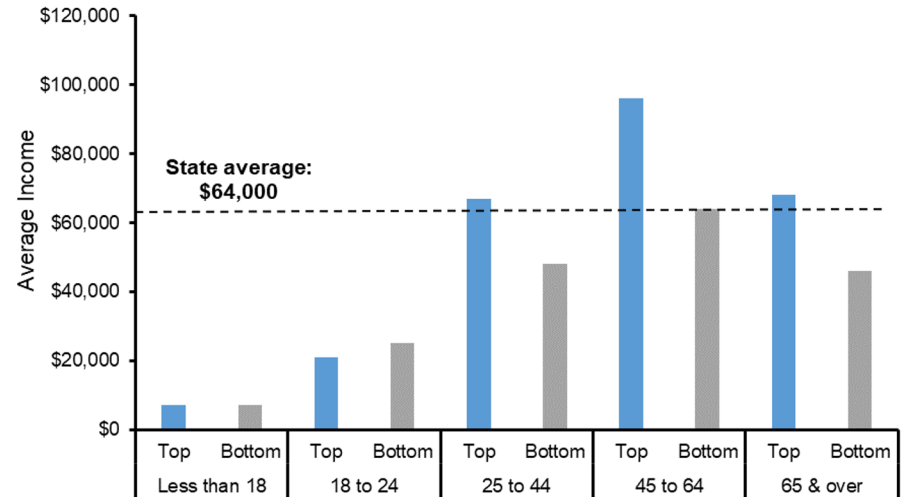
Filers Represent 29% - 90% of County Populations

Compared counties with highest (Top 5) and lowest (Bottom 5) percentages

Filer % of Population by Age Group

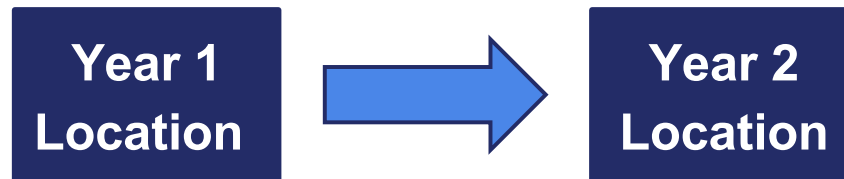


Average Income by Age Group



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Migration Definitions



New Filers

New to the location

Filers Who Stayed

Same location both years

Filers Who Left

Left the location

Total Resident Filers

(New + Stayed)

Net Migration

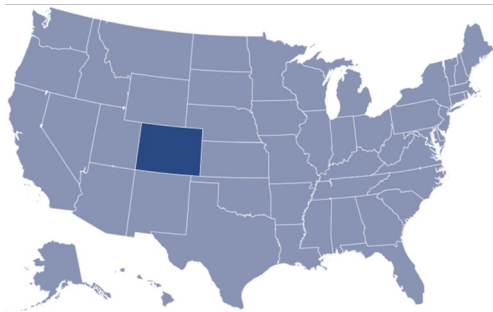
(New - Left)



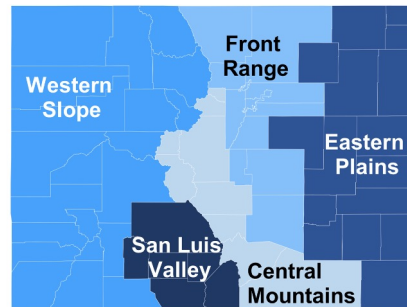
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Migration at Three Location Levels

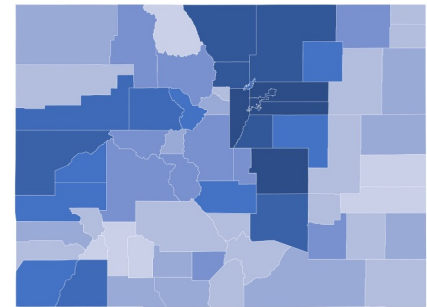
State



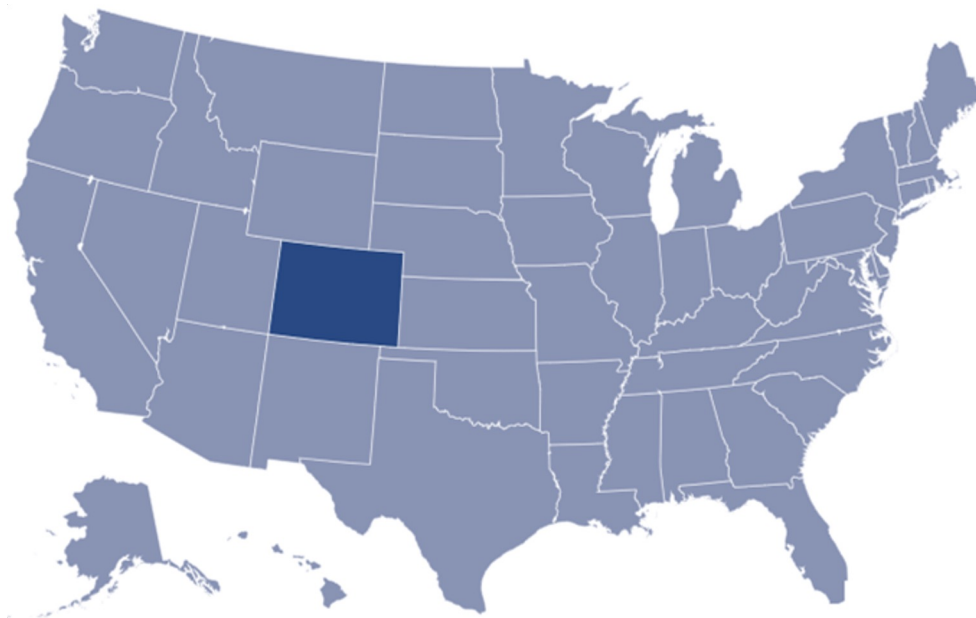
Region



County



State-Level

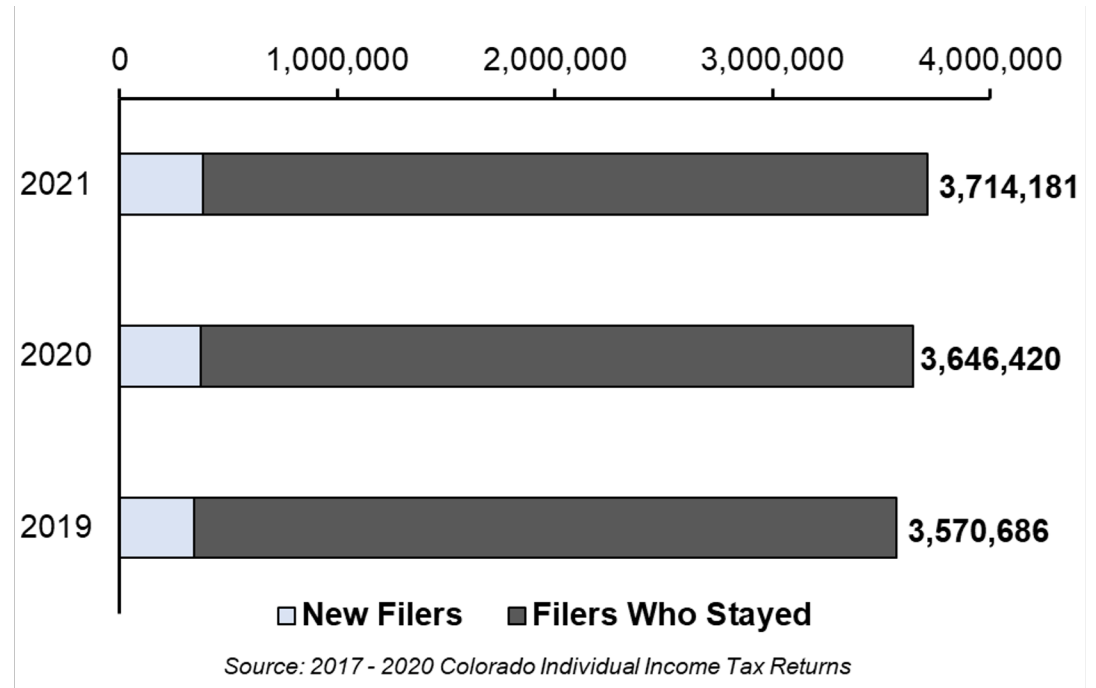


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State: Total Resident Filers (New + Stayed)

New Filers = 10%
Filers Who Stayed = 90%

| YOY Growth Rates | | | |
|------------------|--|--|-------|
| | | | Total |
| 2021 | | | 1.9% |
| 2020 | | | 2.1% |

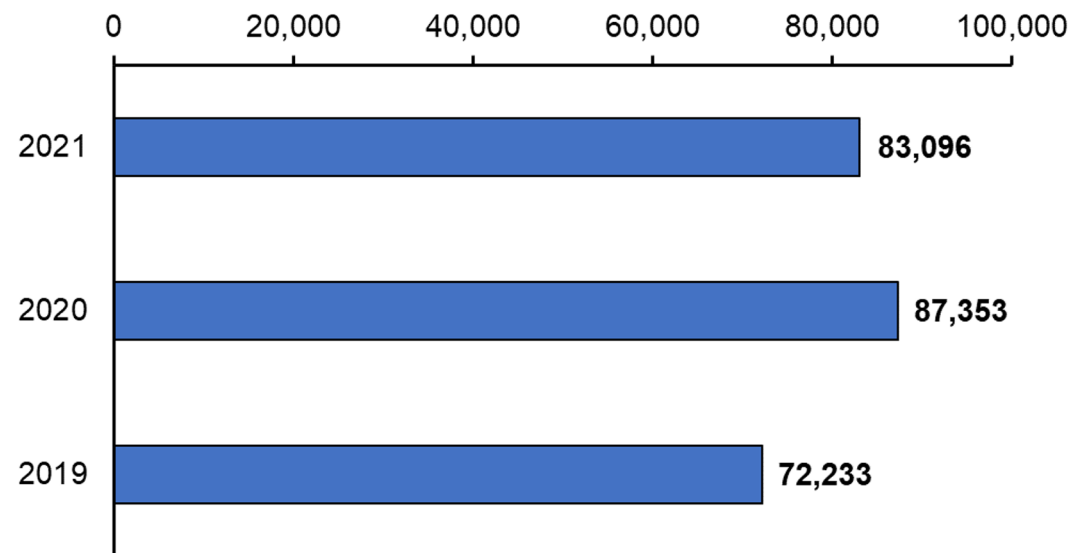


The numbers to the right of the bars are Total Resident Filers

State: Net Migration

| YOY Growth Rates | | | |
|------------------|-----|------|---------------|
| | New | Left | Net Migration |
| 2021 | | | -4.8% |
| 2020 | | | 21% |

Pandemic effect?



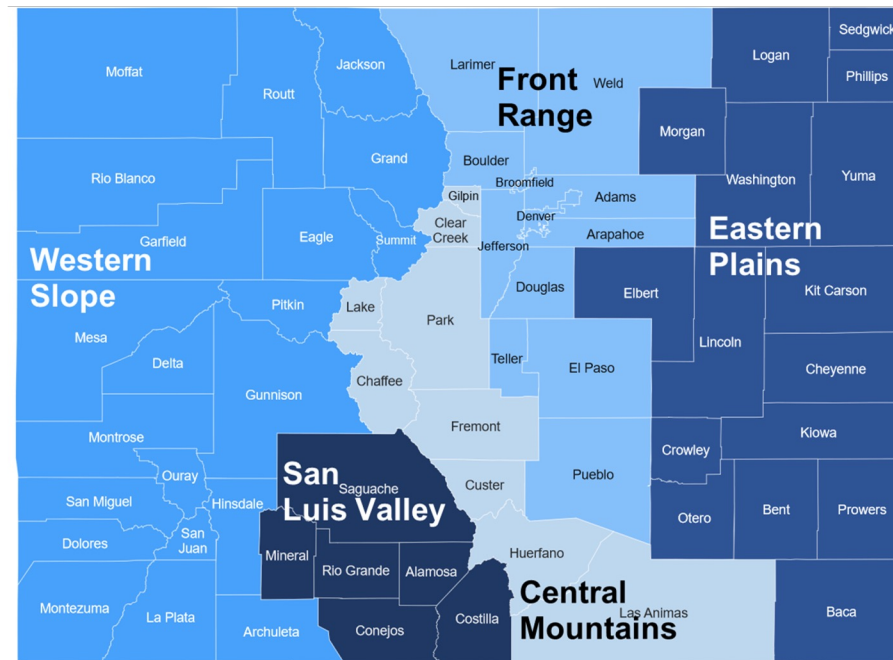
Source: 2017 - 2020 Colorado Individual Income Tax Returns

The numbers to the right of the bars are Net Migration



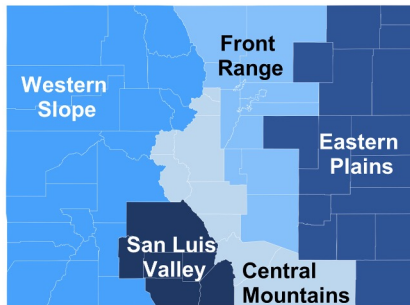
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Region-Level



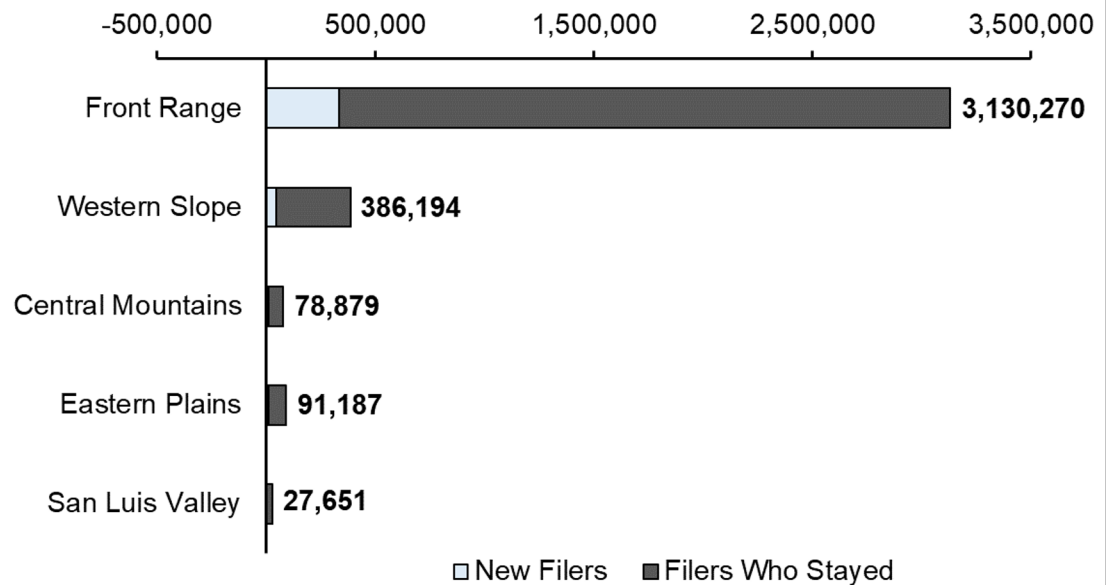
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Region: Total Resident Filers in 2021



84% of filers live in the Front Range

New filers are **11% - 16%** of the total filers in each region



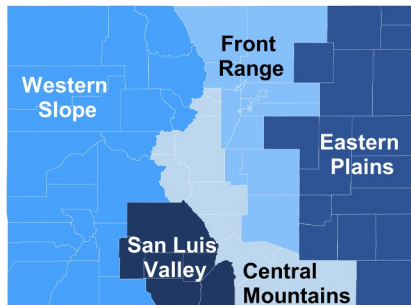
Source: 2019 - 2020 Colorado Individual Income Tax Returns



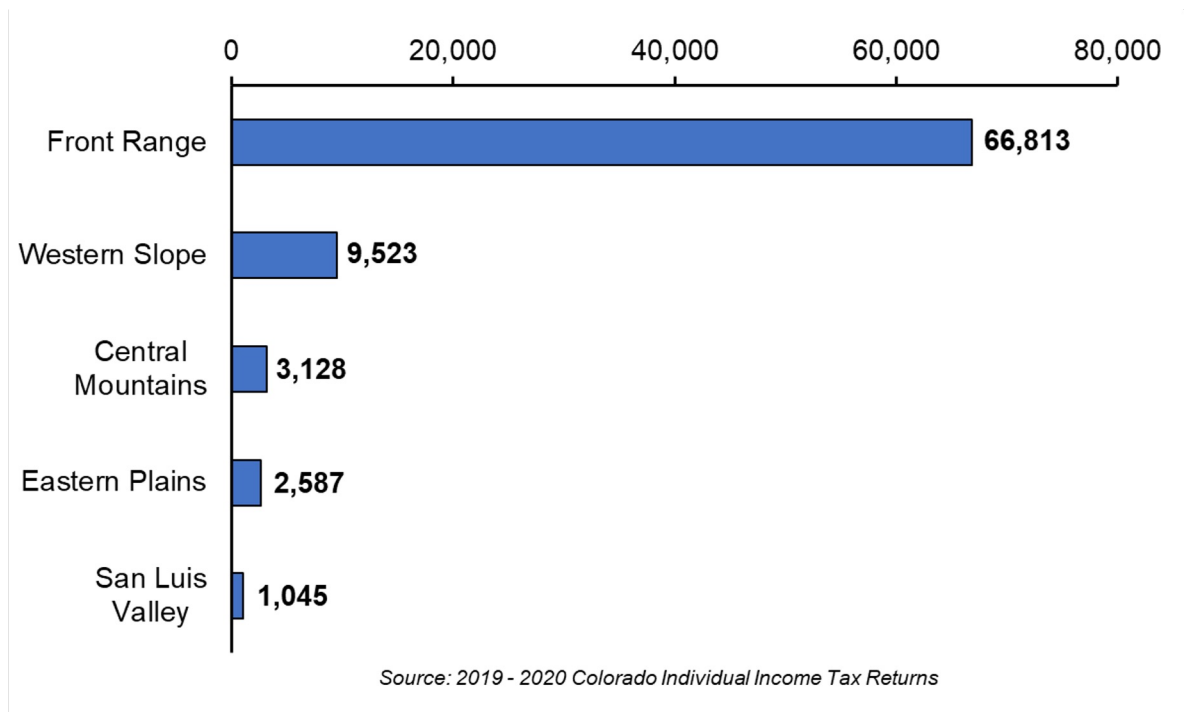
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The numbers to the right of the bars are Total Resident Filers

Region: Net Migration from 2020 to 2021



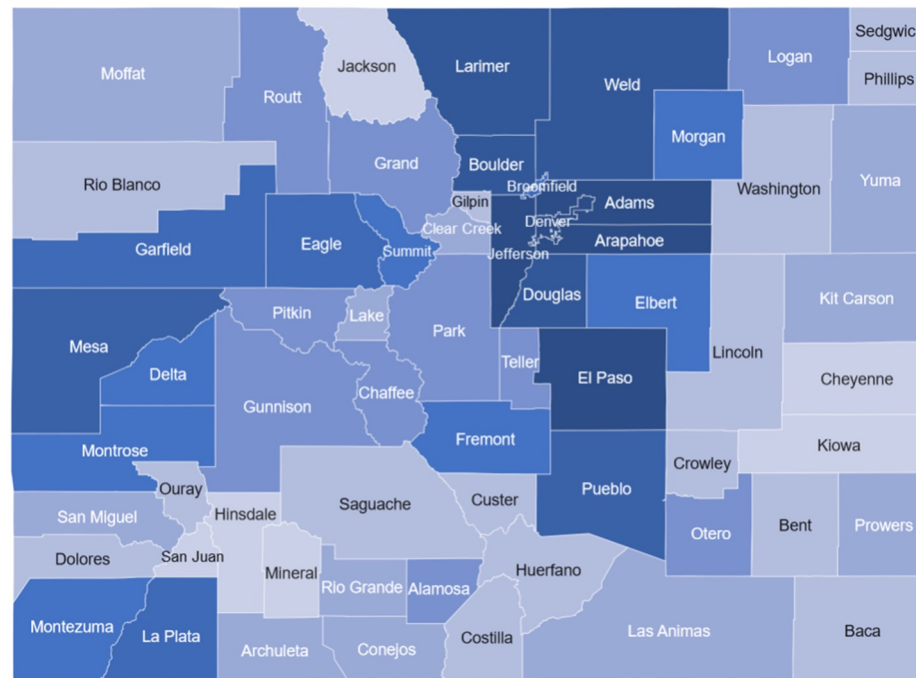
For every 1,000 filers there were **21-40 net new filers**



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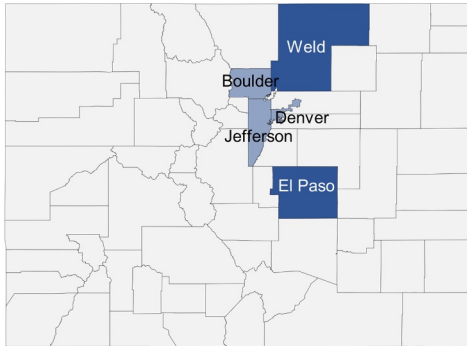
The numbers to the right of the bars are Net Migration

County-Level



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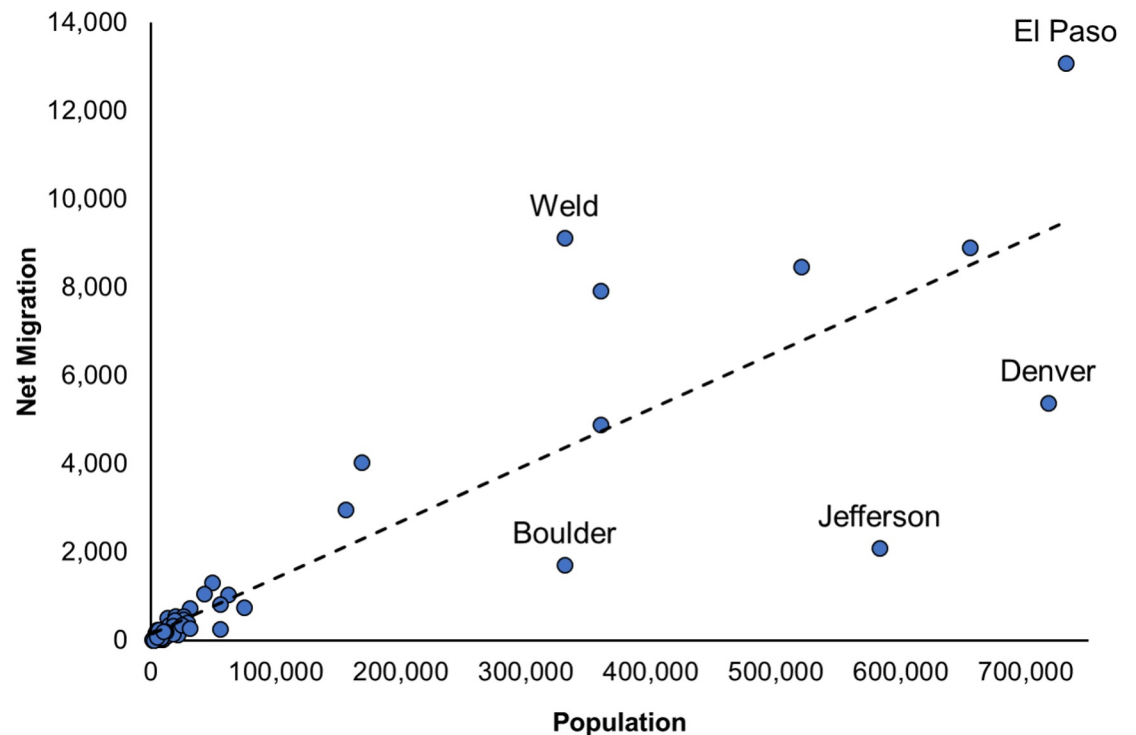
County: Population & Net Migration are Correlated



Net migration decreased 55-65% in 2021 for these high population counties:

Boulder, Jefferson, and Denver

Pandemic effect?



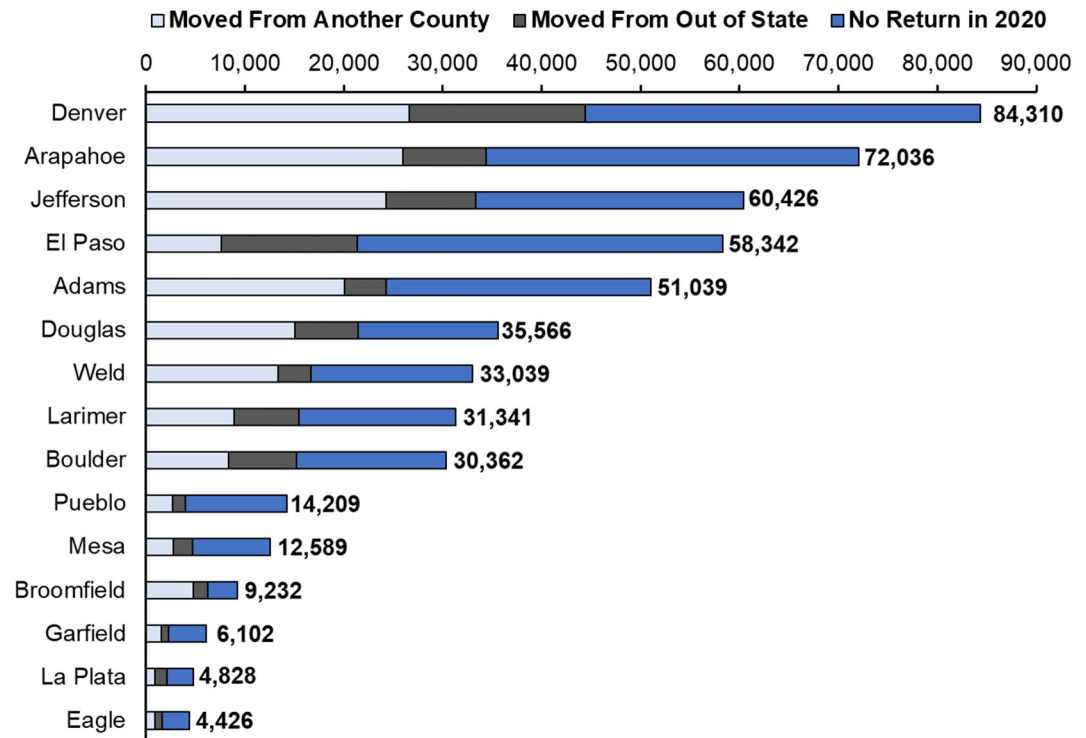
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County: New Filer Composition in 2021

48% of new filers moved from another county or from out of state

52% of new filers did not file a return in 2020

- Didn't live in CO
- No/Low income
- Didn't file



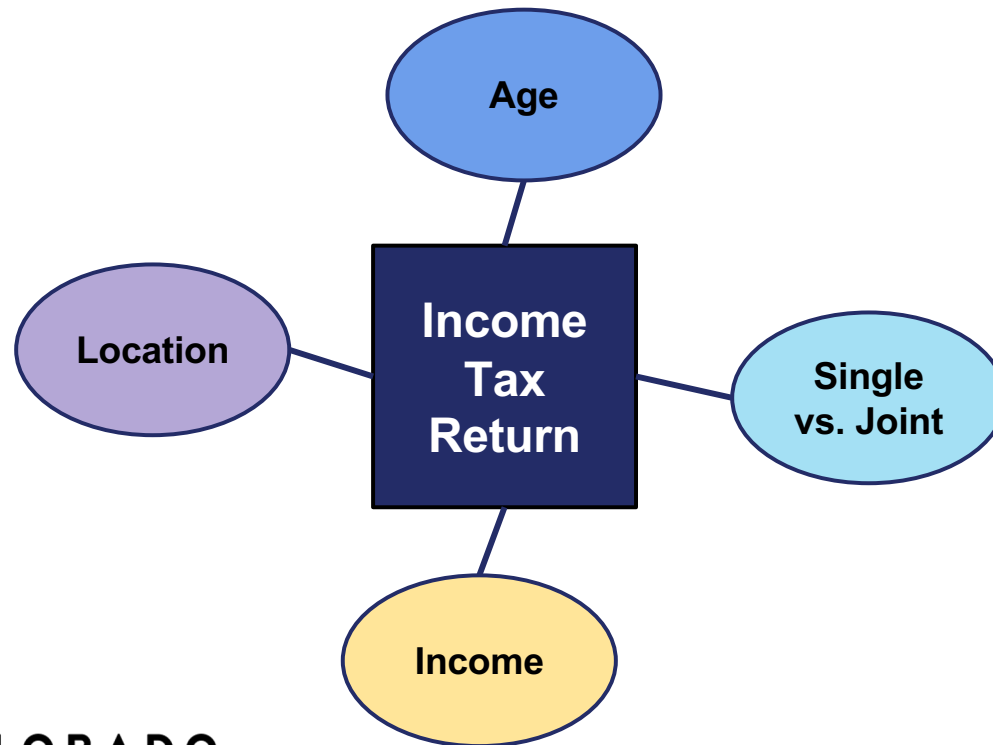
Source: 2019 - 2020 Colorado Individual Income Tax Returns

The numbers to the right of the bars are Total New Filers



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Demographics



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Demographics Definitions

Single vs. Joint: One or two tax filers per return

Age: Age of filer on December 31st of the tax year

Income: Federal adjusted gross income (AGI)
For joint returns, divided AGI in half

Number of Filers and Median Income Vary by Age

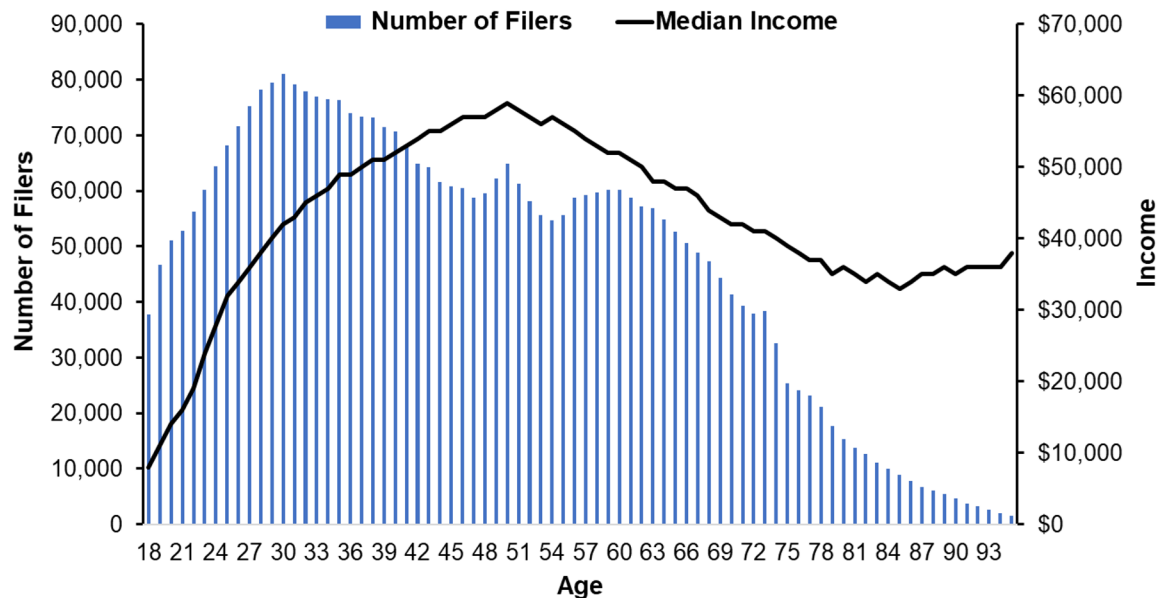
Number of Filers & Median Income by Age (2020)

Average age is **46**

Median income is **\$43K**

Steady increase of filers up to **age 30**

Median income peaks at **\$59K** at age 50



Source: 2020 Colorado Individual Income Tax Returns



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Joint Filers Have Higher Income

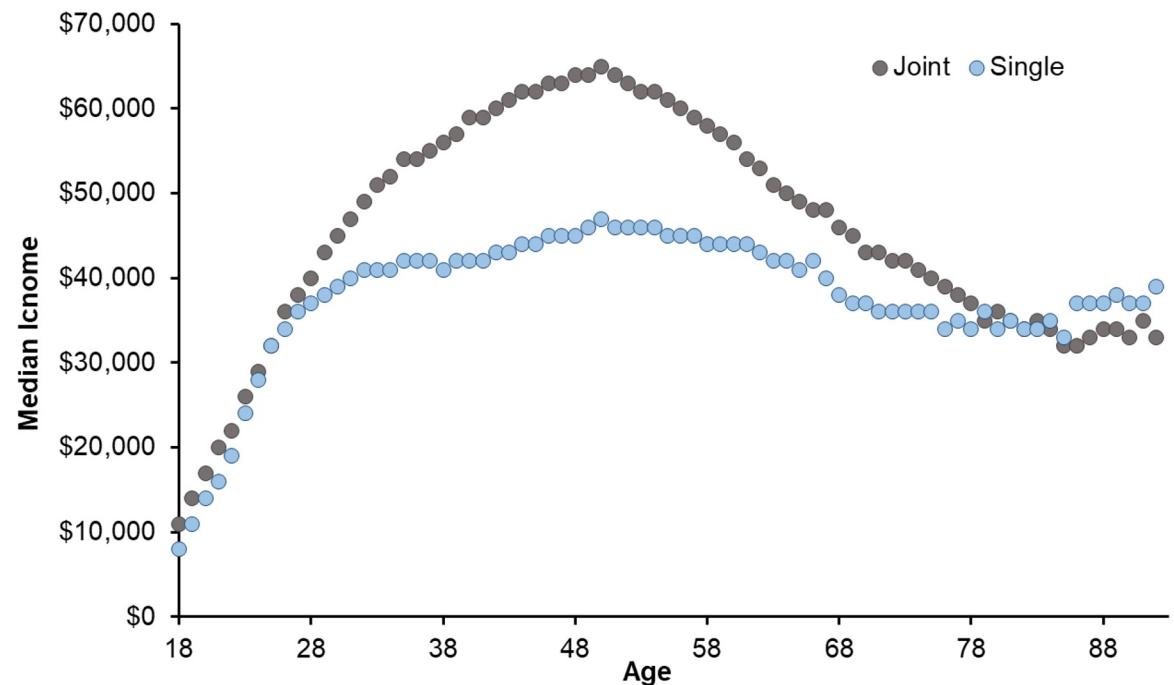
Joint filers earned **20 - 40% more** than single filers for ages 30 - 73

Single income remains **fairly flat** after age 28

Income peaks at age 50

- Single = \$47K
- Joint = \$65K

Median Income for Single & Joint Filers by Age (2020)



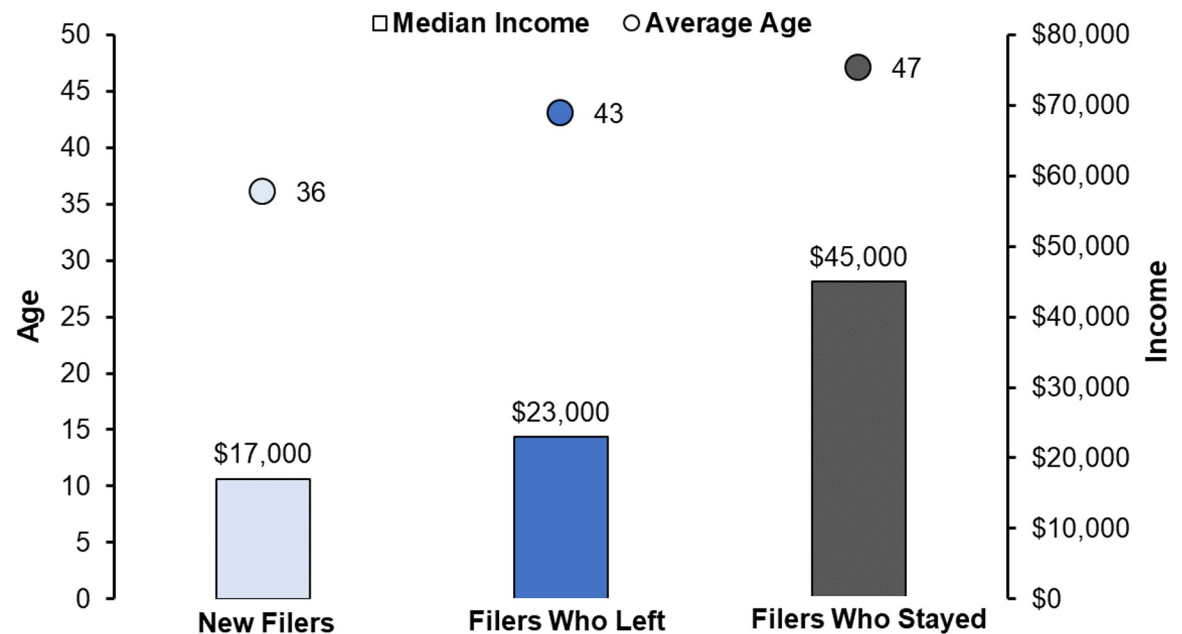
Source: 2020 Colorado Individual Income Tax Returns

Age and Income Vary by Migration Status

Age & Income (2020) by Migration (2020 to 2021)

New Filers and **Filers Who Left** tend to be younger & have lower income

Filers Who Stayed are oldest & have highest income

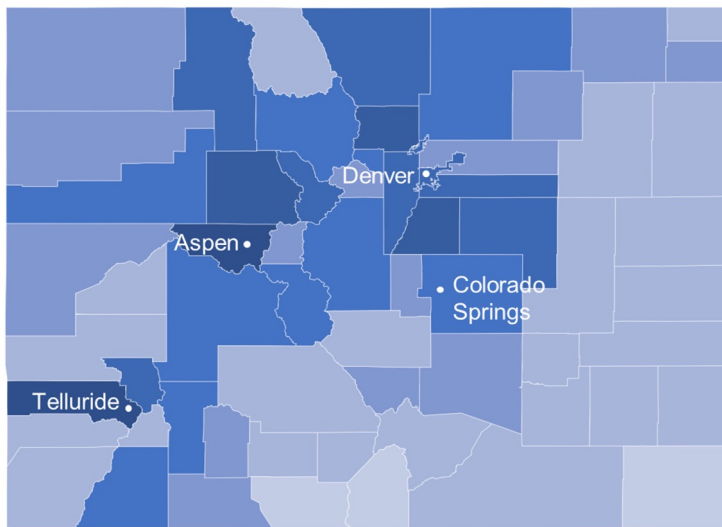


Source: 2019 - 2020 Colorado Individual Income Tax Returns

County-level Income & Home Prices are Correlated

Average Income

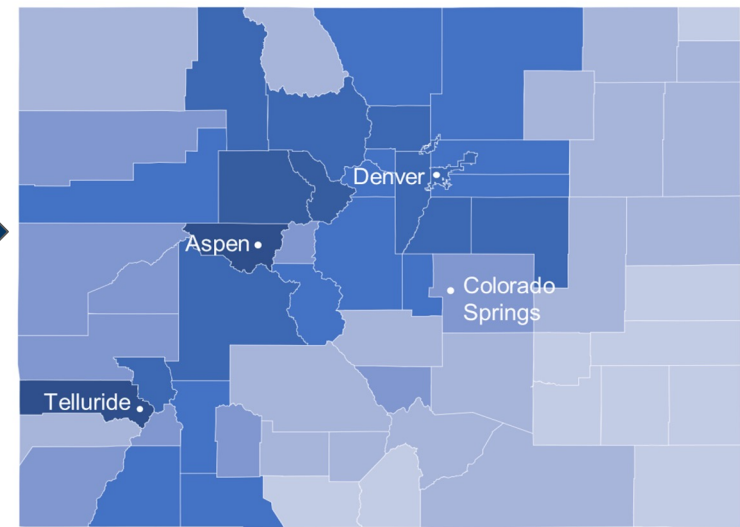
■ \$100K or more ■ \$85K to \$100K ■ \$60K to \$85K ■ \$50K to \$60K
■ \$40K to \$50K ■ \$30K to \$40K ■ \$0 to \$30K



Source: 2020 Colorado Income Tax Returns

Average Home Price

■ \$800K or more ■ \$600K to \$800K ■ \$450K to \$600K ■ \$350K to \$450K
■ \$250K to \$350K ■ \$150K to \$250K ■ \$0 to \$150K



Source: Zillow home value index by county, 2020

Correlation =
0.95



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How Could You Use This Data?

- Economic and population **forecasting**
- Estimating demographic impacts of **legislation**
- Tracking migration patterns for state and local **planning**
- Improving **customer service** or targeting **outreach**

Key Takeaways

Migration

- Total filers < total population → *Filers are 64% of 2020 population*
- Filer growth slowed in 2021, especially New Filers → *Pandemic effect?*
- Population & net migration are correlated, but some high population counties had a 55-65% drop in net migration → *Pandemic effect?*

Key Takeaways

Demographics

- Average age is 46 and median income is \$43k in tax year 2020
- Joint filers have higher income than single filers
- New filers and filers who left tend to be younger and have lower income
- Income and housing prices are highly correlated across counties

Thank you!

Website:

<https://cdor.colorado.gov/data-and-reports/income-tax-data/tax-filer-demographics-and-migration-reports>

Email: dor_ora@state.co.us

Tax Filer Demographics and Migration Reports

About the Reports

These reports summarize the demographics and migration of Colorado individual income tax filers. Data is summarized at the state, region, and county levels. The demographic data includes the average age, average federal adjusted gross income ("income"), and median income of the filers in each location. The migration data compares state income tax returns matched on taxpayer ID from two consecutive years to determine total resident filers, filers who stayed, new filers, filers who left, and net migration per location. Net migration is the number of new filers minus the number of filers who left.

Note that the numbers in these reports are not total populations, just the population of individual income tax filers. The reports do not include individuals that are not required to file a Colorado tax return such as dependents without income or individuals with income below the minimum required to file.

