

INDIVIDUAL INCOME TAX: ANALYSIS OF NEW MONTANA RESIDENTS IN CY 2020 & CY 2021

A Report Prepared for the
Financial Modernization and Risk Assessment (MARA) Study

By
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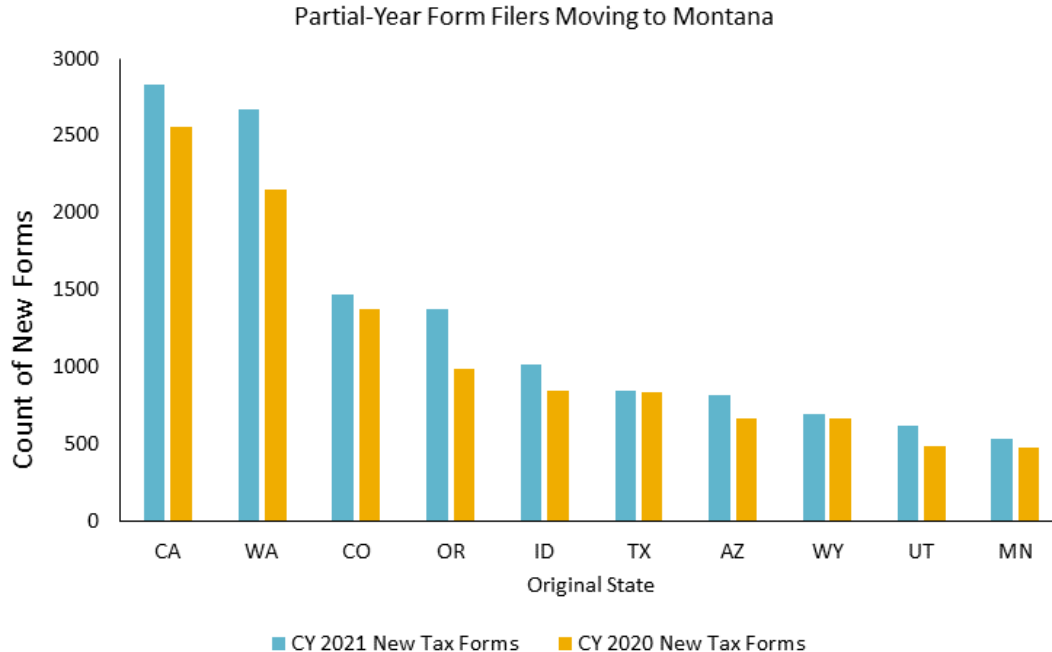
October 17, 2023

BACKGROUND

This report is a continuation of an ongoing analysis of income tax trends in Montana, especially concerning new residents in the state. There have been two prior reports. The first [report](#) analyzed non-resident incomes in CY 2019 compared to full-year residents, as well as those who moved here in CY 2019. The second [report](#) analyzed income distributions of residents who moved to Montana in 2020, as well as how incomes changed into CY 2020 for those residents who moved here in CY 2019. The initial focus of MARA when studying income tax returns was before the Covid-19 public health emergency and sought to study the impacts of the ageing demographics of the state. In particular, the study analyzed how incomes differed between those of retirement age compared to working age. Given the in-migration that Montana has experienced since the start of the COVID-19 pandemic, focus has shifted towards the impact that these new residents may have on Montana's revenue picture. It is estimated that Montana experienced population growth of 1.7% in CY 2021, far more than the estimated 1.1% growth in CY 2020. Since the last report, the LFD has received the CY 2021 individual income tax returns, and this report focuses on these new residents as well as new residents from CY 2020. These analyses are performed using data reported on filed tax forms. **Throughout this report the terms tax filers and residents are often used interchangeably but are really a proxy for households.**

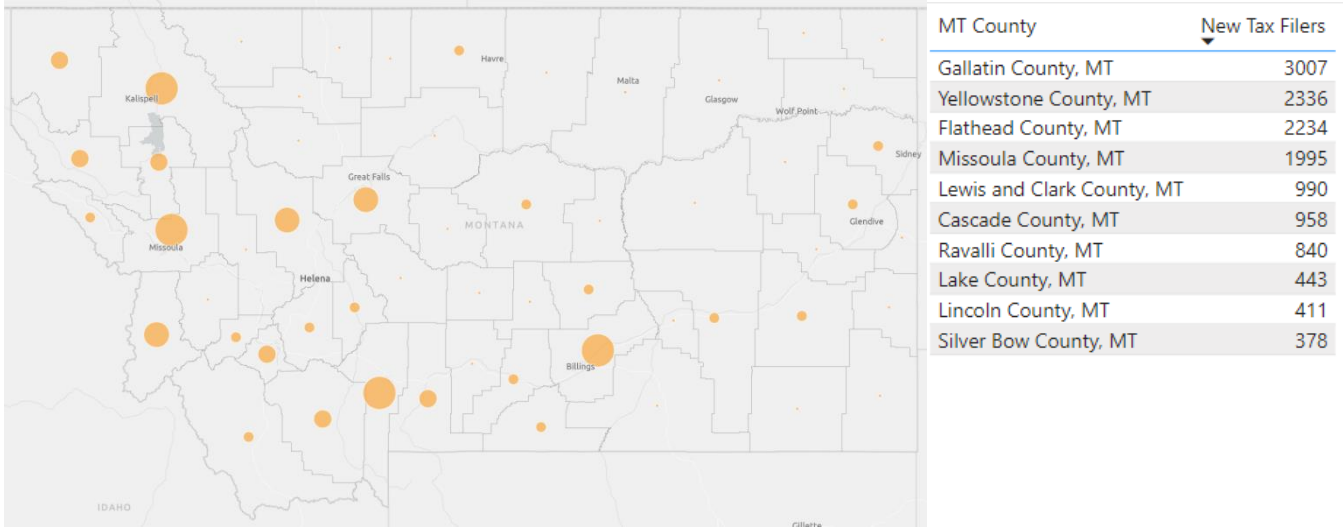
CY 2021 PARTIAL & FULL-YEAR RESIDENTS

Taxpayers who file taxes in Montana are either residents, non-residents, or partial-year residents. Partial-year residents are those individuals who were residents in Montana for part of the year. The following graph shows the top ten states in CY 2021 from where people moved to Montana from, along with corresponding numbers for CY 2020 new filers. Minnesota was the only state that changed in the top ten, switching places with North Dakota in CY 2021. Note that these represent new tax forms being filed within the state, not necessarily people.

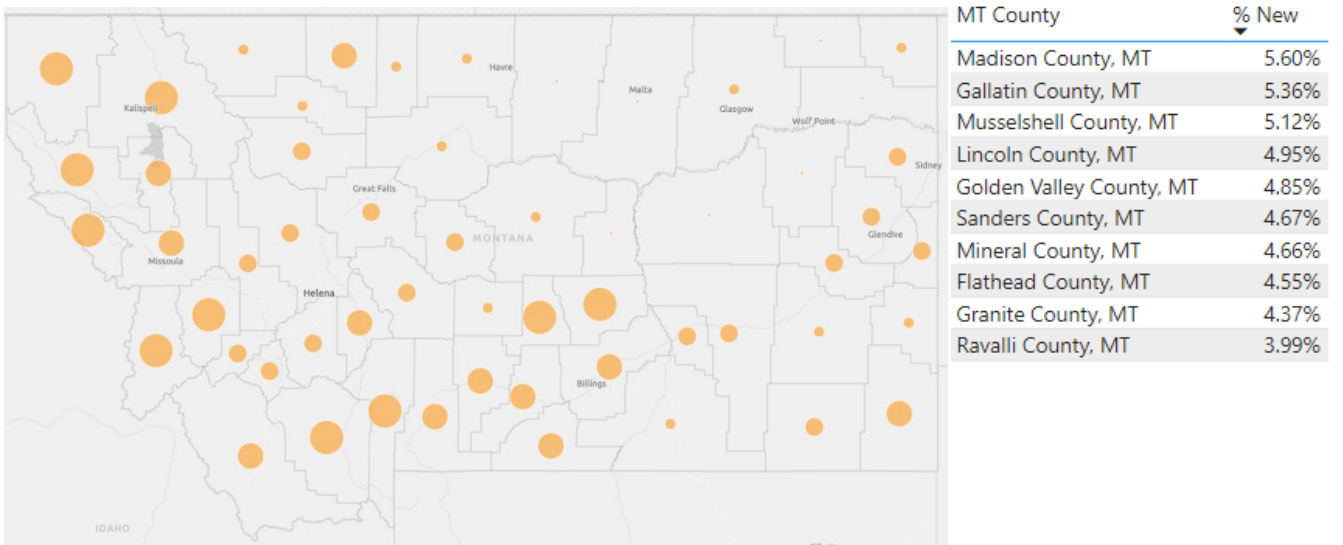


In CY 2021, there were 20,144 new partial-year resident filers in Montana compared to 18,077 in CY 2020. For those new residents coming to Montana, the most populous counties saw more new residents. Gallatin county had the largest number of new tax forms filed, with Flathead, Missoula, Yellowstone, and Lewis and Clark counties rounding out the top five.

The following figure shows how the new partial-year residents were disbursed across the state. As one would expect, and in similar fashion to new residents who moved to Montana in CY 2020, the most populous counties saw the most new residents.



While the most populous counties saw the most growth in terms of forms filed, the picture is quite different when looking at growth as a percent of a county's population. The following table and map show total growth by county (new partial-year filers divided by full-year filers).



When looking at growth as a percent, it is more widespread and not at all isolated to the most populous counties. The two tables below show growth rates of the top ten counties after being adjusted for age cohorts. Some of the more rural counties experience high percentage growth due to their small populations, but it is growth, nonetheless.

MT County	Under 65 Growth	MT County	Over 65 Growth
Madison County, MT	6.96%	Lincoln County, MT	2.79%
Musselshell County, MT	6.39%	Sanders County, MT	2.70%
Golden Valley County, MT	6.17%	Golden Valley County, MT	2.68%
Gallatin County, MT	6.06%	Mineral County, MT	2.50%
Lincoln County, MT	5.99%	Ravalli County, MT	2.30%
Sanders County, MT	5.71%	Musselshell County, MT	2.13%
Granite County, MT	5.66%	Carbon County, MT	2.08%
Mineral County, MT	5.57%	Madison County, MT	2.08%
Flathead County, MT	5.37%	Flathead County, MT	2.07%
Sweet Grass County, MT	4.90%	Lake County, MT	1.95%

Note that the growth rates were higher for working-age filers compared to their older counterparts. While those over 65 who are moving to Montana typically have strong incomes, as will be seen later in the report, a higher proportion of younger filers are moving here compared to the established tax filer population. Full-year filers over the age of 65 make up about 24% of all filers. For those new filers who moved to the state in CY 2021, only 9% of them were over the age of 65.

For the remaining analysis, income levels will be analyzed for those partial year residents who moved to Montana in CY 2021. It does not include those partial year residents who left the state. To remain consistent with previous analyses this analysis only includes tax forms with a positive tax liability.

Median vs. Average

The next section of the report focuses on comparing Montana residents vs new residents and shows comparisons in terms of median and average Federal Adjusted Gross Income (FAGI). The median simply represents the middle value of all taxpayers, whereas the average is impacted more by larger incomes. Furthermore, taxes liabilities are derived from income, both large and small, therefore it may make more sense to use averages for comparisons to get insight into potential revenue impacts.

As a collective unit, Montana tax filers had a median Federal Adjusted Gross Income (FAGI) of \$53,372 in CY 2021. As has been the trend in past analyses, this varies significantly based on age. Those residents under the age of 65 had a median FAGI of \$48,245. For those residents over the age of 65 the median FAGI was \$74,427.

On average, Montana tax-filers had an FAGI of \$102,180 in CY 2021. Tax-filers under 65 had an average FAGI of \$88,781 while those over 65 had an average FAGI \$155,332. New residents to the state had an average FAGI of \$110,806, with those over 65 averaging \$201,050 and those under 65 averaging \$103,183.

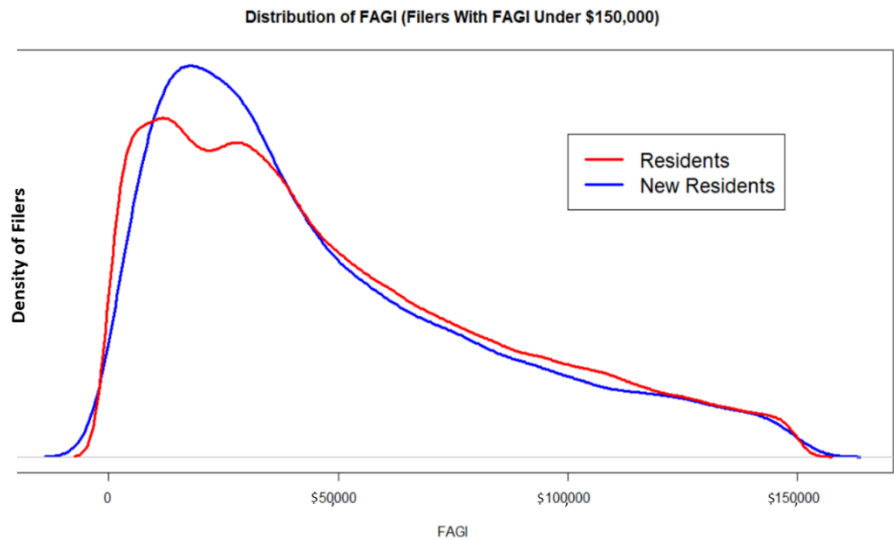
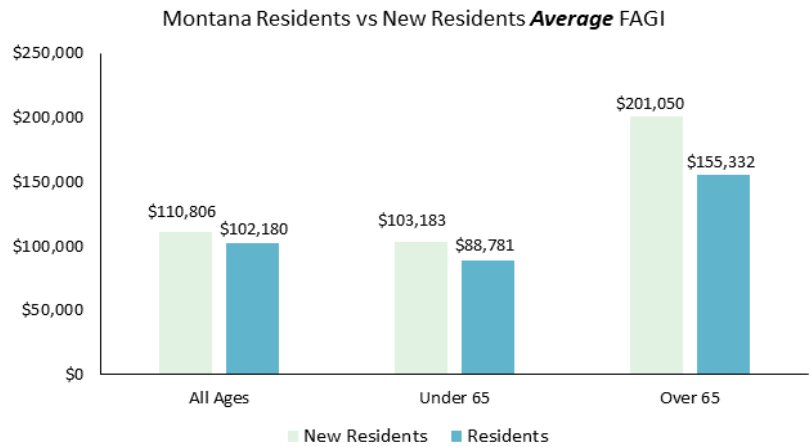
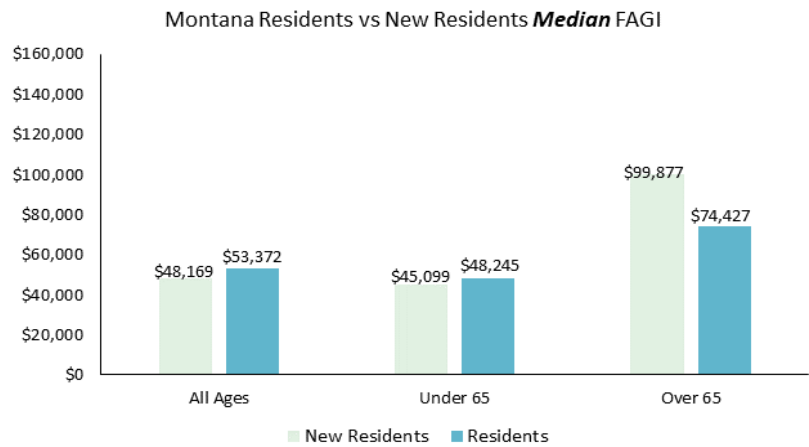
The two charts to the right compare both **median** and **average** FAGI of full-year residents and new CY 2021 residents.

On average, new residents earned more in CY 2021 across all ages and both age demographics, whereas for median incomes only those new residents over the age of 65 earned more than full-year residents. This indicates that those new residents at the upper income levels earned more than their resident counterparts.

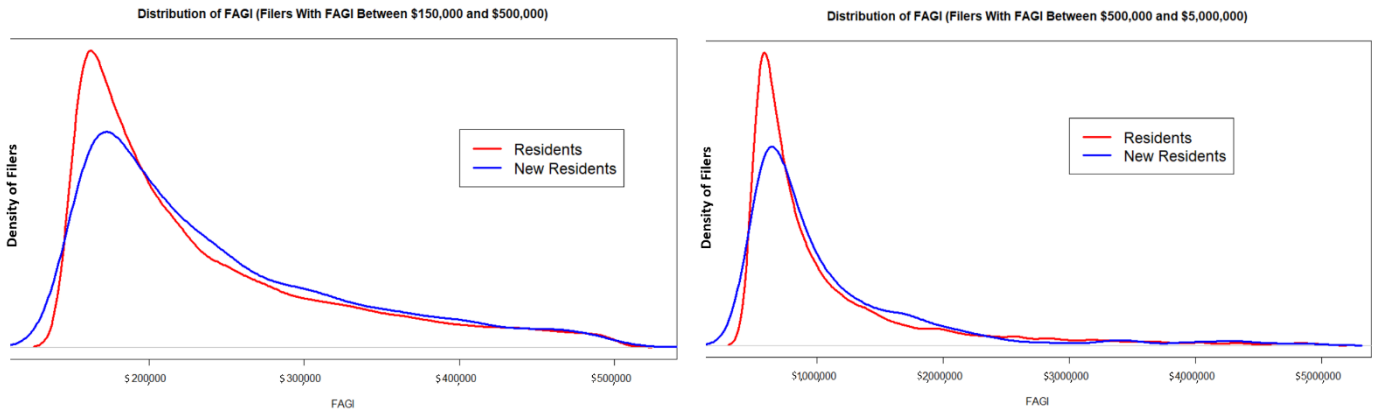
In fact, the top 10% of new residents had an average FAGI of \$605,510, compared to \$508,472 for full-year residents. Even the median was higher for the top 10%, with new residents having a median FAGI of \$281,240 and full-year residents having a median FAGI of \$241,449.

The following graphs provide more detail into the specific income distributions of new filers and full-year filers.

While both the median and average measurements provide comparisons between new filers and full-year resident filers, examining the distributions of these two cohorts can help further illustrate the differences between two. The distribution graph to the right shows the frequency of filers with a FAGI between \$0 and \$150,000. As the graph illustrates, a higher frequency of new filers falls below approximately \$40,000 than full-year filers. However, beyond that point up to nearly \$150,000, the full-year filers have a larger frequency of filers in that range than their new filer counterparts. Since the majority of filers (approximately 87%) have incomes within this range, it is not surprising that the median (middle value) is higher for full-year filers.



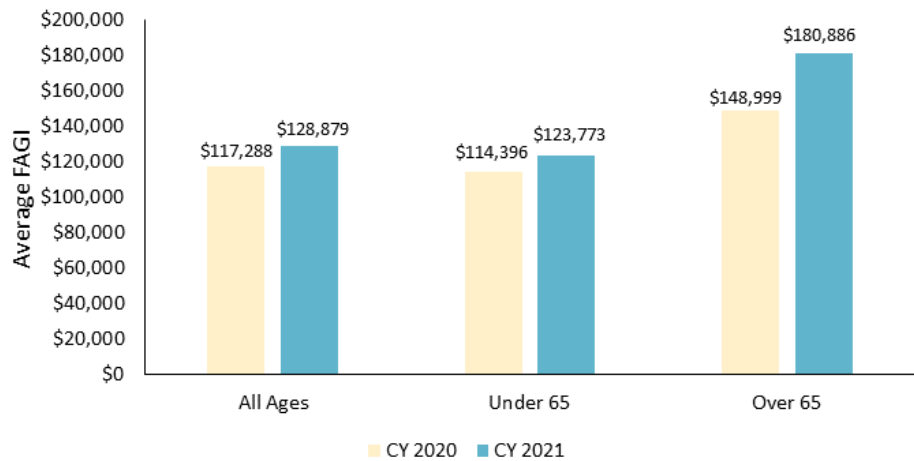
Given that the average FAGI was larger for new-filers, it should therefore follow that there is a higher percentage of high-income earners for new filers compared to full-year filers. The following two distribution graphs illustrate this, one showing FAGI from \$150,000 to \$500,000 and the other displaying filers with FAGI's from \$500,000 to \$5,000,000.



CY 2020 Partial-Year Residents and Succeeding Full-Year CY 2021 Income

In last year's analysis on CY 2020 income, in similar fashion to above for CY 2021 partial-year residents, FAGI levels were analyzed. FAGI was used because it is a comparable income metric that all taxpayers report on their federal income tax form. As a result, each partial-year filer would report an FAGI the year they moved to Montana, as well as the full succeeding year in which they lived here. Each taxpayer has a unique taxpayer ID in Montana's Gentax tax system. Using these ID's, those taxpayers who moved to Montana in CY 2020 were tracked to see how their incomes changed, if at all, once they resided in Montana for a whole year in CY 2021.

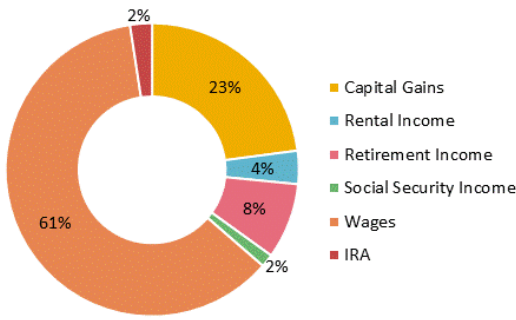
Those taxpayers who moved to Montana in CY 2020 saw their income increase in CY 2021, and was especially pronounced for those over the age of 65.



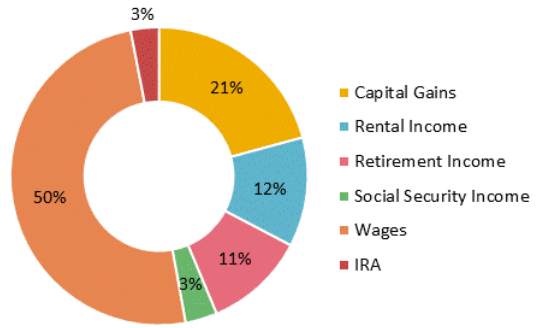
On average, taxpayers who moved to Montana in CY 2020 saw their FAGI increase in CY 2021. In aggregate, these taxpayers saw their average FAGI grow from \$117,288 to \$128,879, an increase of 9.9%. Those working-age residents under 65 saw their incomes grow 8.2%, from \$114,396 to \$123,773. ***This indicates that these individuals acquired similar paying jobs in Montana or were able to bring their jobs with them.*** Finally, those over 65 saw the largest increase from \$148,999 to \$180,886, an increase of 21.4%.

Compared to full-year residents, those who moved in CY 2020 and were established residents for all of CY 2021 had a larger percentage of wages in their income portfolio than full-year filers. ***This was partially due to extremely strong capital gains income for full-year filers, with total capital gains income nearly tripling from CY 2020 to CY 2021. In the previous five years, capital gains income averaged 8% of total income while wages averaged 60%.***

New 2020 Residents' Full CY 2021 Income Distribution

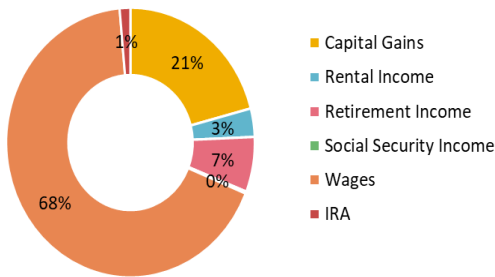


CY 2021 Full-Year Residents' Income Distribution

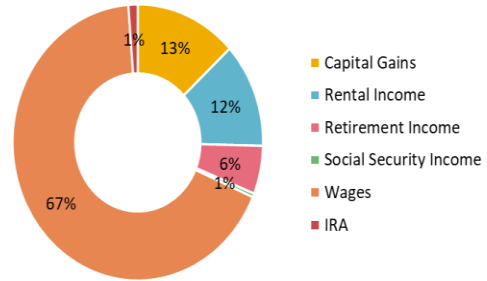


The strong capital gains income for full-year residents in CY 2021 was predominantly driven by a select few filers over the age of 65. When examining the same portfolios for filers under 65, who make up a disproportionately higher share of filers compared to full-year residents, it can be seen that they have a capital intense portfolio.

New 2020 Residents' Full CY 2021 Income Distribution (Under 65)

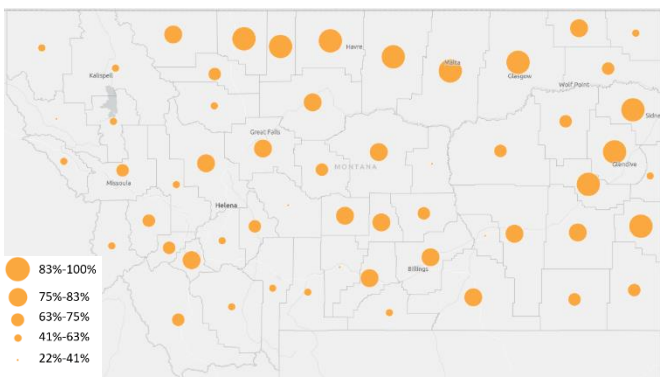


CY 2021 Full-Year Residents' Income Distribution (Under 65)

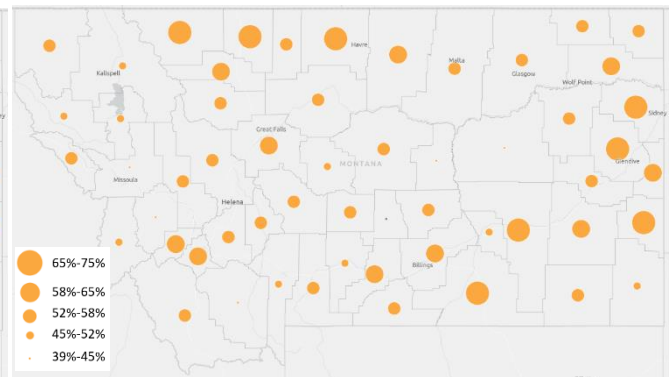


Income distributions for both full-year filers and new filers differ from county to county. While high proportions of wage income are common for both full-year filers and new filers, there are notable regional differences for relative densities of other income types. The figures below show the counties with the highest densities of wage income out of their total income portfolio. The figure below illustrates the same metric for CY 2021 for those new filers from CY 2020.

New Filers Proportion of Wage Income

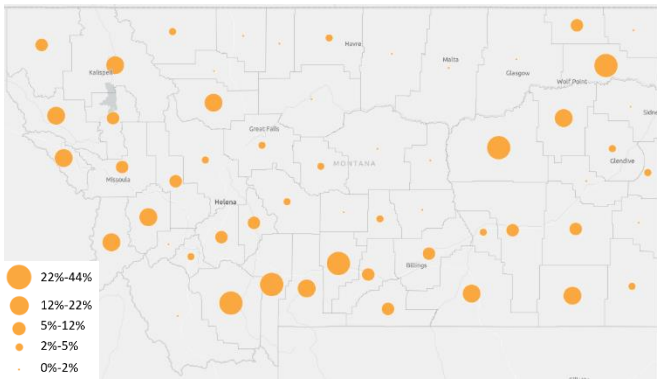


Full-Year Filers Proportion of Wage Income

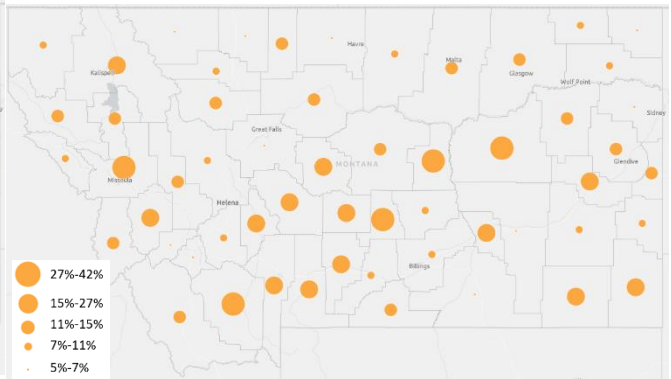


The two figures below show the highest densities of capital gains income.

New Filers Proportion of Capital Gains Income

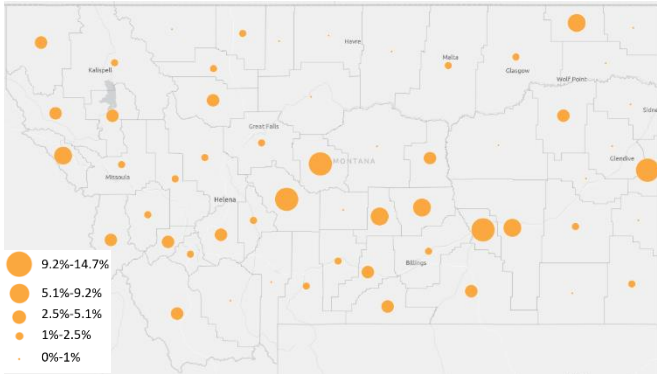


Full-Year Filers Proportion of Capital Gains Income

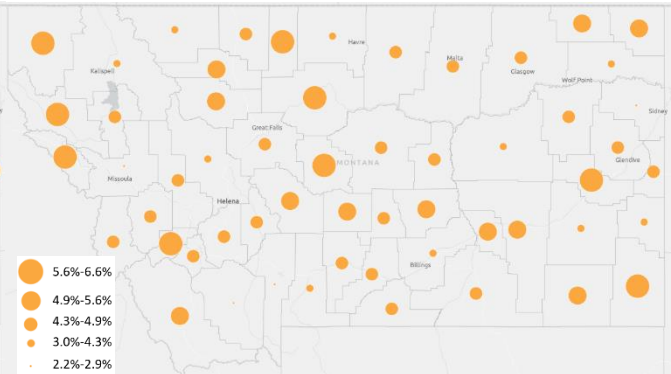


The following two figures show the highest densities of social security income.

New Filers Proportion of Social Security Income

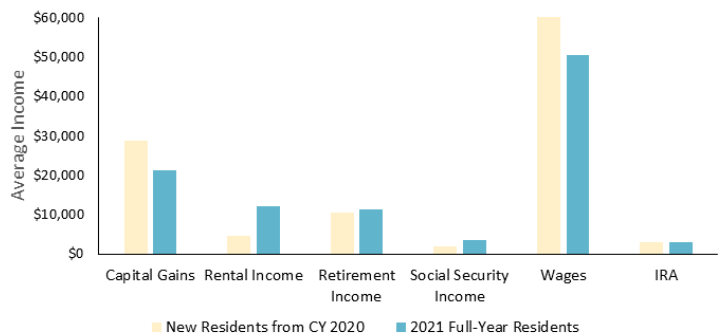


Full-Year Filers Proportion of Social Security Income



The average CY 2021 income amounts by income type for those who moved to Montana in CY 2021 is shown to the right, along with the comparable levels for all full-year CY 2020 residents. As was mentioned earlier, taxpayers who moved to Montana in CY 2020 had an average FAGI of \$128,879 in CY 2021. CY 2021 full-year residents had an average FAGI of \$102,180.

Taxpayers who moved to Montana in CY 2020 had larger CY 2021 average incomes than CY 2021 residents as a whole, and was driven by larger capital gains and wage income.

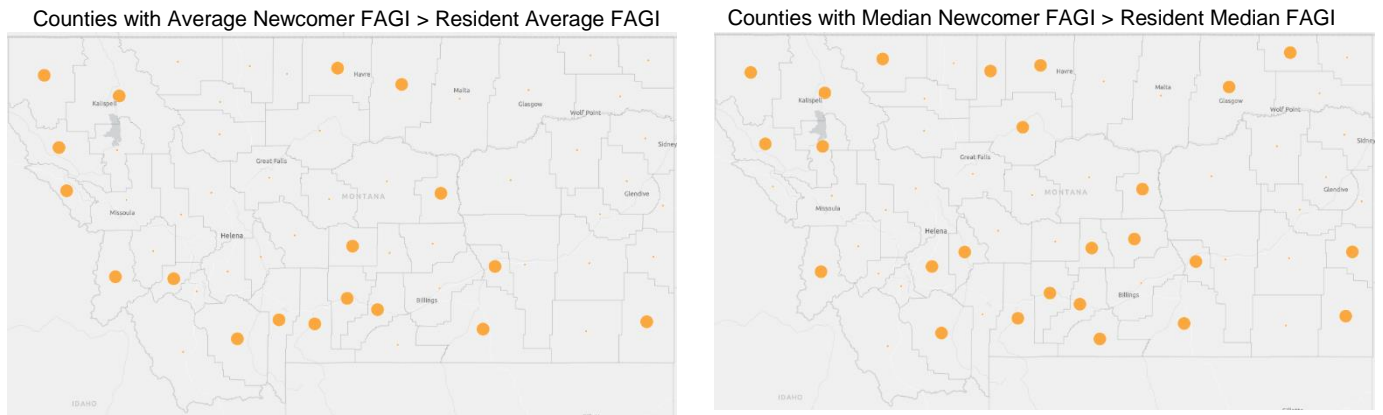


The two charts below show the same metrics after adjusting for the age of the tax filers.



In the previous charts some of the largest differences fall in those filers under the age 65. New filers from 2020 had average capital gains income of \$25,420 in CY 2021 compared to \$11,498 for full-year filers. In addition, new filers from CY 2020 had average wage incomes of \$81,910 in CY 2021, compared to wage incomes of \$58,646 for full-year filers under the age of 65. Note that there are many taxpayers who did not record income in every category shown in the charts above. Therefore, looking at the median values is not as informative as average amounts, as the median is 0 for many income categories.

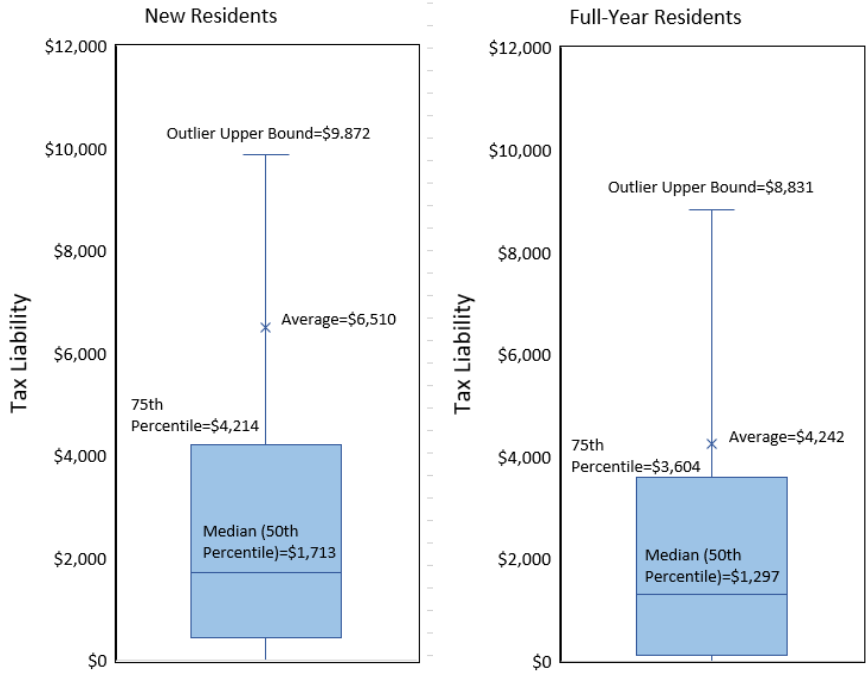
As the charts above illustrate, on average new filers from CY 2020 had larger incomes than Montana full-year filers in CY 2021. However, this is not true for every county. The two graphics below show those counties that had larger average FAGI's for new filers compared to full-year filers in CY 2021 as well as the same comparison for median FAGI's.



The table below shows the top ten counties with at least ten new filers that had the highest average FAGI in CY 2021, compared to full-year filers. The table on the right shows the same ten counties' median CY 2021 FAGI for both new filers who arrived in CY 2020 and full-year filers.

Average FAGI				Median FAGI			
County	New Residents	Full-Year Residents	% Difference	County	New Residents	Full-Year Residents	% Difference
Madison County	\$1,627,897	\$215,579	655%	Madison County	\$66,788	\$61,546	9%
Gallatin County	\$154,707	\$133,661	16%	Gallatin County	\$51,699	\$57,269	-10%
Flathead County	\$147,195	\$107,054	37%	Flathead County	\$59,754	\$54,787	9%
Sweet Grass County	\$122,391	\$90,125	36%	Sweet Grass County	\$68,057	\$58,950	15%
Ravalli County	\$109,544	\$93,305	17%	Ravalli County	\$66,470	\$55,138	21%
Park County	\$96,254	\$93,726	3%	Park County	\$60,033	\$53,455	12%
Stillwater County	\$94,717	\$93,723	1%	Stillwater County	\$72,686	\$69,137	5%
Jefferson County	\$92,990	\$100,626	-8%	Jefferson County	\$69,828	\$68,288	2%
Carbon County	\$92,911	\$93,291	0%	Carbon County	\$62,796	\$59,674	5%
Lincoln County	\$91,576	\$70,846	29%	Lincoln County	\$54,900	\$47,503	16%

While Federal Adjusted Gross Income is a starting point for calculating a filers tax liability, taxpayers are allowed to claim multiple additions, subtractions, deductions, and credits that either lower or increase their final tax liability. The two box-and-whisker plots show the tax liabilities in CY 2021 for those who moved to Montana in CY 2020 and full-year filers. **Furthermore, these plots include all filers, even those filers who had \$0 in total tax liability.**



As the plots above show, the CY 2021 average and median tax liability was larger for the filers who moved to Montana in CY 2020 compared to full-year filers. The average liability for new filers (\$6,510) was more than 50% greater than that of full-year filers (\$4,242). The new filer median (50th percentile) of \$1,713 was more than 30% larger than the full-year filer counterpart of \$1,297. **Furthermore, 15.6% of full-year filers had no tax liability compared to only 7.3% of new filers.**

FUTURE IMPLICATIONS

In the five years prior to the Covid-19 pandemic, Montana’s population had been growing at approximately 0.98% per year. Over the past three years however, growth has increased to an average of 1.44%. While it is too early to know if this becomes the new norm, new filers so far have had a larger proportion of high-income filers than existing full-year Montana filers. Generally speaking, this results in higher tax liabilities and an increasing individual income tax base. However, new filers are also bringing incomes that are comprised of higher shares of capital gains income. If recent in-migration patterns persist, Montana’s income taxes will continue to grow, but may become even more volatile in the process if capital gains income increases its share of total income.

Appendix

Summary Statistics of CY 2021 Income for New Filers from CY 2020 Compared to Full-Year Residents						
MT County	Count (New 2020 Residents)	Average FAGI (New 2020 Residents)	Average FAGI (MT Residents)	Median FAGI (New 2020 Residents)	Median FAGI (MT Residents)	
Beaverhead County, MT	79	\$71,186	\$77,776	\$50,568	\$50,850	
Big Horn County, MT	28	\$68,645	\$56,926	\$49,048	\$38,362	
Blaine County, MT	10	\$73,079	\$66,564	\$37,890	\$47,221	
Broadwater County, MT	65	\$78,799	\$87,676	\$54,477	\$54,402	
Carbon County, MT	126	\$92,911	\$93,291	\$62,796	\$59,674	
Carter County, MT	12	\$73,804	\$71,632	\$60,285	\$53,444	
Cascade County, MT	557	\$73,274	\$77,494	\$46,295	\$49,129	
Chouteau County, MT	19	\$55,355	\$76,171	\$52,232	\$50,883	
Custer County, MT	91	\$66,862	\$72,163	\$42,662	\$48,588	
Daniels County, MT	3		\$82,529		\$55,532	
Dawson County, MT	59	\$55,180	\$82,515	\$42,476	\$55,074	
Deer Lodge County, MT	53	\$90,616	\$69,828	\$43,471	\$49,111	
Fallon County, MT	10	\$64,255	\$81,782	\$63,750	\$63,191	
Fergus County, MT	71	\$67,754	\$78,589	\$35,748	\$50,721	
Flathead County, MT	1537	\$147,195	\$107,054	\$59,754	\$54,787	
Gallatin County, MT	2091	\$154,707	\$133,661	\$51,699	\$57,269	
Garfield County, MT	5		\$83,176		\$51,421	
Glacier County, MT	38	\$55,835	\$60,325	\$41,014	\$40,405	
Golden Valley County, MT	7		\$89,948		\$50,081	
Granite County, MT	29	\$79,462	\$97,003	\$49,508	\$54,586	
Hill County, MT	82	\$73,073	\$71,457	\$58,515	\$49,119	
Jefferson County, MT	98	\$92,990	\$100,626	\$69,828	\$68,288	
Judith Basin County, MT	8		\$72,350		\$50,768	
Lake County, MT	257	\$82,031	\$85,853	\$49,808	\$47,928	
Lewis and Clark County, MT	680	\$80,363	\$89,000	\$53,793	\$59,102	
Liberty County, MT	2		\$77,223		\$52,725	
Lincoln County, MT	229	\$91,576	\$70,846	\$54,900	\$47,503	
Madison County, MT	165	\$1,627,897	\$215,579	\$66,788	\$61,546	
McCone County, MT	6		\$75,339		\$56,542	
Meagher County, MT	12	\$61,828	\$71,427	\$33,358	\$46,888	
Mineral County, MT	67	\$75,964	\$71,151	\$48,979	\$51,079	
Missoula County, MT	1545	\$88,569	\$145,219	\$46,663	\$50,258	
Musselshell County, MT	49	\$62,946	\$75,377	\$51,423	\$49,380	
Park County, MT	243	\$96,254	\$93,726	\$60,033	\$53,455	
Petroleum County, MT	2		\$71,333		\$46,994	
Phillips County, MT	16	\$59,125	\$61,636	\$40,706	\$47,864	
Pondera County, MT	36	\$61,848	\$69,950	\$44,774	\$48,706	
Powder River County, MT	13	\$47,833	\$70,004	\$50,222	\$52,752	
Powell County, MT	46	\$80,944	\$91,177	\$45,433	\$49,874	
Prairie County, MT	7		\$67,388		\$52,304	
Ravalli County, MT	560	\$109,544	\$93,305	\$66,470	\$55,138	
Richland County, MT	73	\$66,827	\$88,140	\$48,474	\$62,306	
Roosevelt County, MT	28	\$67,190	\$73,308	\$35,843	\$51,452	
Rosebud County, MT	32	\$50,387	\$78,713	\$34,812	\$61,243	
Sanders County, MT	135	\$85,451	\$73,906	\$57,316	\$47,521	
Sheridan County, MT	29	\$62,771	\$79,233	\$40,596	\$55,029	
Silver Bow County, MT	267	\$60,838	\$75,571	\$42,434	\$48,506	
Stillwater County, MT	79	\$94,717	\$93,723	\$72,686	\$69,137	
Sweet Grass County, MT	29	\$122,391	\$90,125	\$68,057	\$58,950	
Teton County, MT	39	\$68,922	\$78,668	\$42,930	\$54,989	
Toole County, MT	28	\$64,290	\$72,729	\$44,633	\$51,498	
Treasure County, MT	9		\$73,530		\$52,869	
Valley County, MT	35	\$62,581	\$83,903	\$56,790	\$55,658	
Wheatland County, MT	11	\$74,683	\$71,752	\$36,277	\$44,254	
Wibaux County, MT	6		\$69,845		\$54,636	
Yellowstone County, MT	1346	\$84,669	\$94,495	\$53,348	\$54,853	