

East Tennessee State University

## Digital Commons @ East Tennessee State University

---

Undergraduate Honors Theses

Student Works

---

12-2021

### Examining the Current Role of Out-Of-State Buyers in the Tri-Cities Within the Confines of Residential Real Estate

Paul Arrowood

Follow this and additional works at: <https://dc.etsu.edu/honors>



Part of the [Macroeconomics Commons](#), [Real Estate Commons](#), and the [Regional Economics Commons](#)

---

#### Recommended Citation

Arrowood, Paul, "Examining the Current Role of Out-Of-State Buyers in the Tri-Cities Within the Confines of Residential Real Estate" (2021). *Undergraduate Honors Theses*. Paper 648. <https://dc.etsu.edu/honors/648>

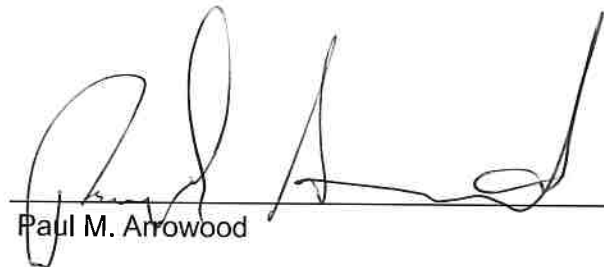
This Honors Thesis - Open Access is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact [digilib@etsu.edu](mailto:digilib@etsu.edu).

Examining the Current Role of Out-Of-State Buyers in the Tri-Cities  
Within the Confines of Residential Real Estate


By  
Paul Marcus Arrowood

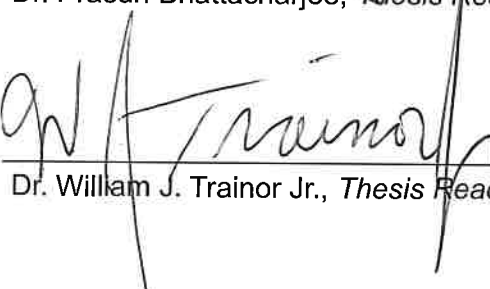
An Undergraduate Thesis Submitted in Partial Fulfillment  
Of the Requirements for the  
Honors-In-Discipline (HID) Program

Honors College  
College of Business and Technology  
East Tennessee State University

  
Paul M. Arrowood  
11/10/21  
Date

  
Dr. Gary L. Shelley, Thesis Advisor  
11/10/2021  
Date

  
Dr. Prasun Bhattacharjee, Thesis Reader  
11/10/2021  
Date

  
Dr. William J. Trainor Jr., Thesis Reader  
11/10/2021  
Date

## **Abstract**

### **Examining the Current Role of Out-Of-State Buyers in the Tri-Cities Within the Confines of Residential Real Estate**

**By**

**Paul Marcus Arrowood**

We are seeing an influx of out-of-state buyers into Tennessee, and the Tri-Cities area specifically. As a major emerging housing market in the US, the Tri-Cities is being inundated by people from all states and walks of life seeking a better life in Appalachia. Although the reasons vary by person, many agree that political alignment, taxation levels, and the quietness of this area lends itself to population growth. While most members of the housing industry have noticed this uptick in out-of-state buyers, few have taken the time to analyze their own records or review the empirical evidence that is present from the past 24-36 months to see where opportunities lie.

Through cooperation with a local real estate attorney, I have obtained records that have been scrubbed of personal details for academic research. Using that information I have run some tests for proportions and changes from 2020 to 2021 to determine the major hot-spot states and regions from which people are moving to Tennessee. After analyzing this data, I have then compared it to input from two real estate agents in the Tri-Cities area regarding what they believe are the largest motivating factors for these out-of-state buyers.

I have concluded that the West Coast Region (and California in particular) are showing the most decisive and conclusive increases in Tennessee home buying. Overall out-of-state buyers are quickly becoming a large demographic of our market, with a statistically significant 7.56% difference in proportion from just last year to this year (2021).

## Table of Contents

	<u>Page</u>
ABSTRACT.....	2
DATA TABLES AND GRAPHS.....	4
<u>Chapters</u>	
INTRODUCTION.....	8
METHODOLOGY.....	9
RESULTS.....	10
INDUSTRY EXPERT OPINIONS.....	15
CONCLUSION.....	17
BIBLIOGRAPHY.....	18

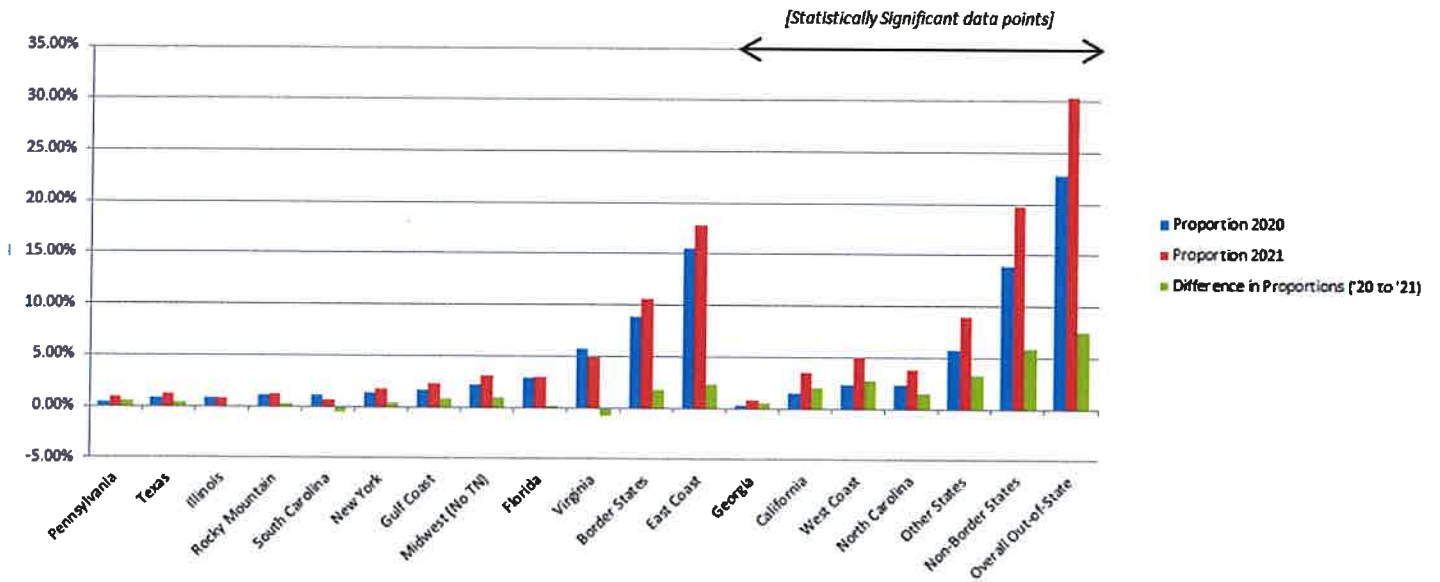
## Data Tables and Graphs

**Table 1: Difference in Proportions and Statistical Significance for Major States and Regions**

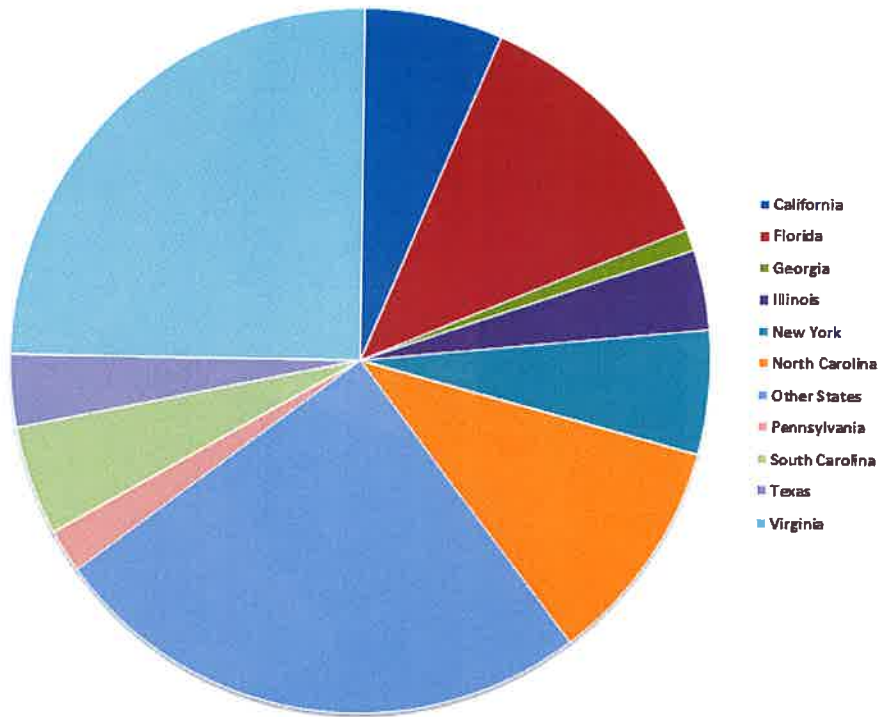
Statistical Significance Table							
2020			2021				
State/Region	Quantity	Sample Proportion*	State/Region	Quantity	Sample Proportion*	20-21 Difference in Proportions	Significant (Y/N)
Overall Out-of-State	298	22.78%	Overall Out-of-State	331	30.34%	7.56%	Y
Non-Border States	182	13.91%	Non-Border States	216	19.80%	5.89%	Y
Other States	75	5.73%	Other States	98	8.98%	3.25%	Y
North Carolina	31	2.37%	North Carolina	42	3.85%	1.48%	Y
West Coast	30	2.29%	West Coast	55	5.04%	2.75%	Y
California	19	1.45%	California	38	3.08%	1.63%	Y
Georgia	3	0.23%	Georgia	9	0.82%	0.60%	Y
East Coast	204	15.60%	East Coast	195	17.87%	2.28%	N
Border States	116	8.87%	Border States	116	10.63%	1.76%	N
Virginia	74	5.60%	Virginia	53	4.86%	-0.60%	N
Florida	37	2.83%	Florida	32	2.93%	0.10%	N
Midwest (No TN)	28	2.14%	Midwest (No TN)	14	3.12%	0.98%	N
Gulf Coast	21	1.61%	Gulf Coast	26	2.38%	0.78%	N
New York	17	1.30%	New York	19	1.74%	0.44%	N
South Carolina	15	1.15%	South Carolina	7	0.64%	-0.51%	N
Rocky Mountain	14	1.07%	Rocky Mountain	14	1.28%	0.21%	N
Illinois	11	0.84%	Illinois	9	0.82%	-0.02%	N
Texas	10	0.76%	Texas	13	1.19%	0.43%	N
Pennsylvania	6	0.46%	Pennsylvania	11	1.01%	0.55%	N

**Graph 1:**

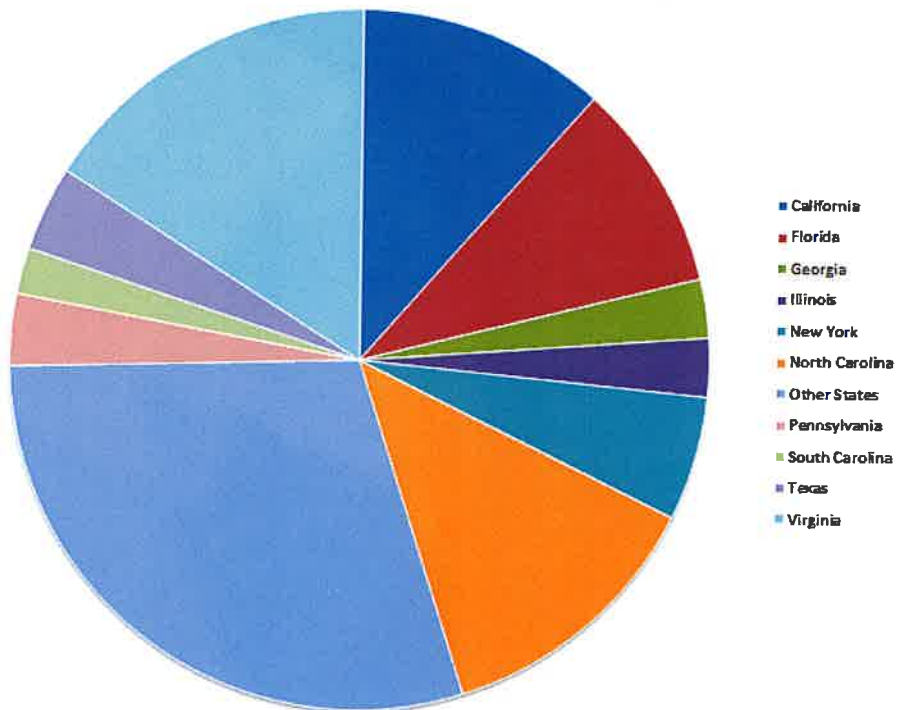
**Difference in Proportions and Statistical Significance from 2020-2021 of TN home buyers**



**Graph 2:**  
**Breakdown of Large Migration States to TN, 2020**



**Graph 3:**  
**Breakdown of Large Migration States to TN, 2021**



**Table 2:**  
**2020 Proportions and Confidence Intervals for Major States and Regions**

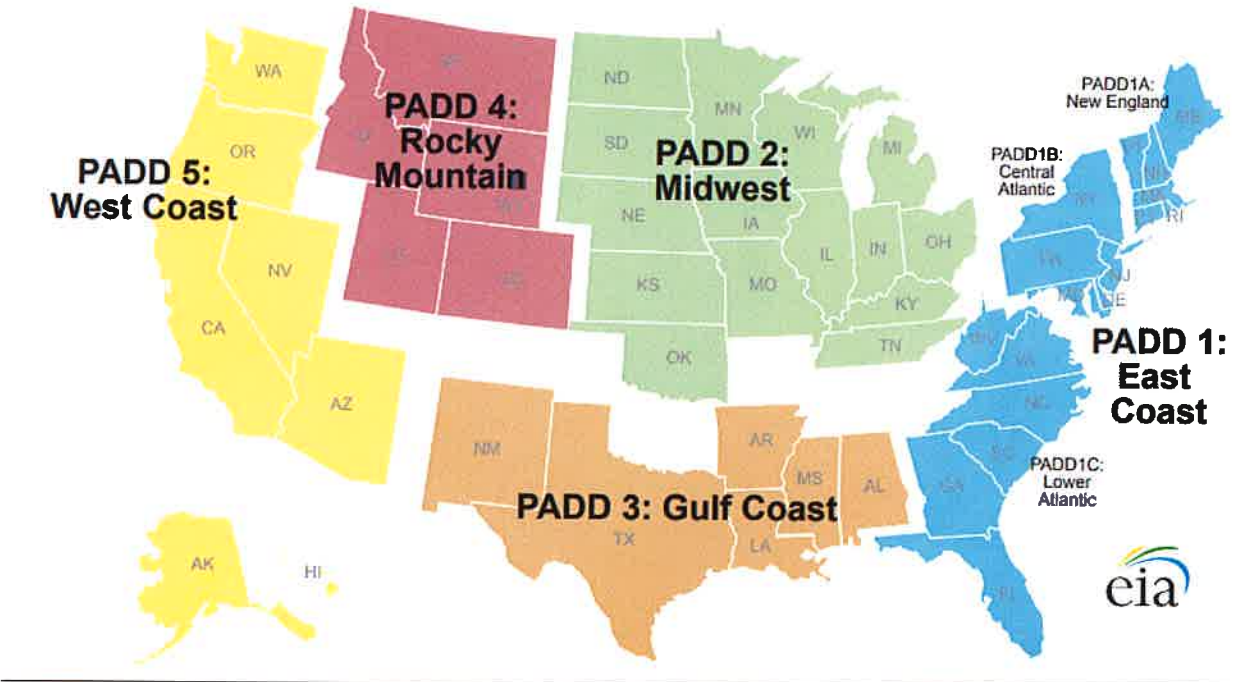
2020 Confidence Intervals		* N = 1308		
State/Region	Quantity	Sample Proportion*	95% Confidence Interval	
			Lower Limit	Upper Limit
Virginia	74	5.66%	4.41%	6.91%
Florida	37	2.83%	1.93%	3.73%
North Carolina	31	2.37%	1.55%	3.19%
California	19	1.45%	0.80%	2.10%
New York	17	1.30%	0.69%	1.91%
South Carolina	15	1.15%	0.57%	1.72%
Illinois	11	0.84%	0.35%	1.34%
Texas	10	0.76%	0.29%	1.24%
Pennsylvania	6	0.46%	0.09%	0.82%
Georgia	3	0.23%	-0.03%	0.49%
Other States	75	5.73%	4.47%	6.99%
<b>Overall Out-of-State</b>	<b>298</b>	<b>22.78%</b>	<b>20.51%</b>	<b>25.06%</b>
Non-Border States	182	13.91%	12.04%	15.79%
Border States	116	8.87%	7.33%	10.41%
Midwest (No TN)	28	2.14%	1.36%	2.93%
East Coast	204	15.60%	13.63%	17.56%
Rocky Mountain	14	1.07%	0.51%	1.63%
Gulf Coast	21	1.61%	0.92%	2.29%
West Coast	30	2.29%	1.48%	3.10%

**Table 3:**  
**2021 Proportions and Confidence Intervals for Major States and Regions**

2021 Confidence Intervals		* N = 1091		
State/Region	Quantity	Sample Proportion*	95% Confidence Interval	
			Lower Limit	Upper Limit
Virginia	53	4.86%	3.58%	6.13%
North Carolina	42	3.85%	2.71%	4.99%
California	38	3.48%	2.40%	4.57%
Florida	32	2.93%	1.93%	3.93%
New York	19	1.74%	0.97%	2.52%
Texas	13	1.19%	0.55%	1.84%
Pennsylvania	11	1.01%	0.42%	1.60%
Illinois	9	0.82%	0.29%	1.36%
Georgia	9	0.82%	0.29%	1.36%
South Carolina	7	0.64%	0.17%	1.12%
Other States	98	8.98%	7.29%	10.68%
<b>Overall Out-of-State</b>	<b>331</b>	<b>30.34%</b>	<b>27.61%</b>	<b>33.07%</b>
Non-Border States	216	19.80%	17.43%	22.16%
Border States	116	10.63%	8.80%	12.46%
Midwest (No TN)	34	3.12%	2.09%	4.15%
East Coast	195	17.87%	15.60%	20.15%
Rocky Mountain	14	1.28%	0.62%	1.95%
Gulf Coast	26	2.38%	1.48%	3.29%
West Coast	55	5.04%	3.74%	6.34%

**Map 1:**  
PADD Map, obtained from EIA (U.S. Energy Information Administration).

Petroleum Administration for Defense Districts





## Introduction

In the Tri-Cities, Tennessee housing market, buyers are now seeing dramatic increases in home prices and real estate demand. In the month of January alone, the average price point of homes was \$37,000 more than the average in January of last year (2020) (Hayes, 2021). My hypothesis is that one common theme may explain a portion of these issues: Out-of-state home buyers. The Wall Street Journal has labeled Johnson City as the number eight ranked emerging housing market. The metrics for this ranking include real estate supply, real estate demand, median home listing price trend, unemployment, and wages among other factors (Ewalt, 2021). Studies also strongly indicate that the political affiliations of regional areas can impact migration within the country (and even within the state) ("Politically," 2019).

My background in the real estate world is on the financial side. Working as a licensed Mortgage Loan Originator has helped me to understand more about the process of buying and selling residential homes. It has also made me able to see firsthand the effect that low interest rates have on an already volatile market. Money is being lent out at historic lows to buyers that are competing fiercely with all-cash offers and exorbitantly increased home values. All aspects of the industry have seen stress and stress points in the last 24 months - appraisers, lenders, realtors, title companies and real estate attorneys, and even insurance providers. These problems are not easily solved unless we can identify the true cause of it.

The goal of this thesis is to prove that the out-of-state demographic of Tri-Cities homebuyers, while still emerging, is an important part of our housing industry and economy. This will be done by reviewing the 2020 and 2021 data indicating where citizens have been relocating from, analyzing the proportions of different states and regions in those years, and also looking at the difference between some of the proportions found across both years. I will then compare that data with industry expert opinions regarding these out-of-state buyer's motivations to suggest that there is more to this than meets the eye.

## Methodology

The research I conducted involved obtaining records from a real estate attorney and title company in the area. The reports the attorney's office was able to run provided me with a survey they send to clients (optional) that collects their home address prior to closing. It also included the address of the property that was purchased, and the date of that closing. The Virginia purchases and clients that did not fill out the optional prior address survey were filtered out. Additionally, I took out clients with multiple (three or more) purchases from the same year with the same prior address as these were likely investors. Lastly, I removed other extraneous data points, such as street address and city. This left me with a two letter abbreviation for the state (Ex. "TN") and a five digit zip code for each client's location prior to moving, as well as the same information (within Tennessee) after closing.

All in all, I was able to procure this data for two years: a year-to-date of 2021 (through the end of September) and all of 2020. There were 1308 transactions for 2020 and 1091 transactions through September in 2021 that I have been able to use as data points after filtering out many other transactions less suitable for this paper. One other consideration is the fact that we will be looking at the proportion of the out-of-state buyers and their respective states/regions. Tennessee is, obviously, the number one state that Tennessee buyers are moving from, so we are looking at that data as little as possible, except in combination with the total data points (N).

When conducting Z-tests for differences in the proportions between 2020 and 2021 data, I have used a 5% alpha to determine whether or not the P-values from my tests warrant rejecting or failing to reject the null hypothesis. The null hypothesis is that there is no statistical significance of the difference in proportions. The confidence interval testing simply gives us a more accurate range of probable proportions based on a standard bell-curve and standard deviations, rather than one, likely flawed, percentage.

## Results

The results of my research have been enlightening and will help us understand better the dynamic of the Tri-Cities housing market. Based on the methodology mentioned earlier, I focused my analysis on the proportions of the different states and regions for the two years of data I collected.

After grouping the total sample sizes from both years into state-specific categories, I began testing the states with eye-catching amounts of Tennessee buyers for the 95% confidence interval of their proportion, for 2020 and 2021 (see Table 2 and Table 3, respectively). Overall Out-Of-State, Border/Non-Border States, and “Other” States (all states grouped together, except Tennessee and the larger states that I have singled out for their own testing).

Virginia was the largest in both sheer quantity and also proportion for both years. This is expected, because of the proximity of Southwest Virginia to Northeast Tennessee. This is also magnified by the fact that the real estate attorney we collected data from is located in Bristol. We can say with 95% confidence that Virginia was responsible for between 4.41% and 6.91% of Tennessee home buyers in 2020. We can also say with the same confidence that they are responsible for between 3.58% and 6.13% in 2021 (Table 2 and Table 3). Although they still took the top spot in 2021, after running a Z-test for the difference in proportions between the two years, we have found that there is NOT a statistically significant difference between last year and this year. **Although insignificant, it is interesting to note that there was a negative difference in proportions between 2020 and 2021 of -0.80% (Table 1).**

Following in descending order of quantity, North Carolina (another border state) was third in quantity and proportion in 2020 and second in 2021. We are 95% confident that, last year, North Carolina made up between 1.55% and 3.19% of TN home buyers, and between 2.71% and 4.99% in 2021 (Table 2 and Table 3). We also find that there WAS a statistically significant increase from year to year for North Carolina. The difference of proportions for NC

was 1.48%. **Although a relatively small percentage, it is interesting to see that a large enough uptick has occurred from 2020 to 2021 in order to see a statistically significant increase from a border state within an hour's drive from Northeast Tennessee.**

Florida, being a geographical location we are quite used to seeing in the mix, came in second in quantity in 2020 and fourth in 2021. Like Virginia, they did not have a statistically significant change from year to year and we also saw another decrease from 2020 to 2021 (Table 1). We are 95% confident that Florida buyers were between 1.93% and 3.73% of the overall Tri-Cities market in 2020, and between 1.93% and 3.93% in 2021 (Table 2 and Table 3). **Those proportions are almost identical, showing no significant increase or decrease.**

Being one of the most talked about states to have home buyers coming to Tennessee, California did not disappoint in our data. We found ourselves 95% confident that the proportion of California buyers in 2020 was between 0.80% and 2.10%, but for 2021 it was between 2.40% and 4.57% (Table 2 and Table 3). **This is a sharp jump. We also found that California was one of only three states that individually showed a statistically significant increase from '20 to '21 (with a 2.03% difference in proportions), and the ONLY one of those three that was not a border state (Table 1).** This is one of the biggest "finds" of this paper. While California buyers are often thrown around in conversation and as a generic limiting factor to prospective in-state buyers, it is a real and significant discussion.

The last individual state I will take the time to lay out and describe is Georgia. It is another border state, and did not have especially large numbers of buyers in either year. The thing that sets Georgia apart is the fact that, although the numbers were low, we did see a statistically significant increase in buyers from Georgia - that difference in proportions was a lowly 0.60% (Table 1). We are 95% confident that Georgia buyers made up between -0.03% and 0.49% of buyers in 2020, and between 0.29% and 1.36% for 2021 (Table 2 and Table 3). The figures are, once again, very low numbers for Georgia, but it is worth remarking that there is a significant difference between the two years.

There are a few states I ran confidence intervals and Z-tests for which will not be mentioned in much detail. They were large enough to warrant a test and to look at their proportions, but they also did not yield any statistically significant differences from year to year, and were fairly small in their samples as well. New York, Texas, Pennsylvania, Illinois, and South Carolina the five that were listed in Tables 1-3 but not broken down in detail here in the results section. From here on out, the category "Other States" refers to all states besides Tennessee, Virginia, North Carolina, Florida, New York, Texas, Pennsylvania, Illinois, Georgia, and South Carolina - the ones analyzed in the above Tables.

The Other States category did show a statistically significant difference of proportion from 2020 to 2021 of 3.25% (Table 1). In 2020, we are 95% confident that the proportion of TN home buyers from these other states was between 4.47% and 6.99% (Table 2). We also see that in 2021, the proportion was between 7.29% and 10.68%, with 95% confidence (Table 3). The implications of this subset primarily show us that states with lower individual numbers are making a big difference overall, once we aggregate them and test for significance. **Once again, we see that by eliminating the "big name states" and ones with the largest numbers, we can clearly show that there is a diverse, nationwide move towards this area**, and it is only increasing.

Border States is a category I tested that includes the eight states we (Tennessee) are touching - Arkansas, Missouri, Kentucky, Virginia, North Carolina, Georgia, Alabama, and Mississippi. As previously mentioned, VA, NC, and GA made up a large portion of this figure. When tested for significance, we found that border states as a whole had not had a statistically significant increase from year to year (Table 1). Although there was a 1.76% difference in proportions, it was not significant. In 2020, the Border States represented between 7.33% and 10.41% of all Tennessee home buyers, with a 95% confidence (Table 2). In 2021, that number was between 8.80% and 12.46% with 95% confidence (Table 3). It is typical to see a large percentage of buyers coming from border states, and it also makes sense that there is no

statistically significant change from 2020 to 2021 - **people moving to Tennessee from nearby is likely a steady statistic and expected in this housing market.**

Since we measured Border States, we also had to have metrics on Non-Border States. As the name implies, this category includes all states except the eight aforementioned border states and Tennessee itself. These states proved to be a substantial chunk of the market. We are 95% confident that Non-Border States were between 12.04% and 15.79% of the TN home buying market for 2020 (Table 2). In 2021, that range jumped up to between 17.43% and 22.16%. We found that this grouping of Non-Border States does, in fact, have a large, statistically significant difference in proportions from 2020 to 2021 (an increase of 5.88%). **This reinforces the argument that where we are seeing the biggest changes recently are in an increase of buyers from not only out-of-state but faroff states.**

In addition to testing states with large numbers of TN home purchases, I also broke it down by region. I chose five regions based on the PADD Map used by the U.S. Energy Information Administration (Map 1). For both 2020 and 2021 data, I grouped together the states into West Coast, Rocky Mountain, Midwest (excluding TN), Gulf Coast, and East Coast regions. Focusing on regions allowed me to analyze areas with states that would show very little statistical value on their own, that perhaps had between one and four Tennessee home buyers in a given year. Rather than doing hypothesis testing and confidence interval testing for 40+ individual states, this was a more efficient approach.

The shocking realization that came with dividing the nation into regions was the fact that only **ONE region showed a statistically significant difference from 2020 to 2021 - the West Coast Region (see Table 1 and Graph 1), with a difference of proportions of 2.75%.**

*Although the East Coast Region has a large proportion of overall TN buyers (between 15.60% and 20.15% with 95% confidence in 2021) we know that there was no statistically significant difference in proportions between 2020 and 2021 (Table 3 and Table 1). By this, we see that the trend is not necessarily spiking in that region, so it is less of a priority for our research. As*

discussed earlier, the largest driving force behind the increase in the West Coast was California. However, there are a few West Coast states that have had increases that are not measurable based on the state by itself, because they are lacking a baseline. For example: Neither Oregon nor Hawaii had any movers to Tennessee in 2020 (based on my data), but in 2021, there were four from Oregon and seven from Hawaii. I cannot conduct a difference of proportions Z-test on these states, since there is no baseline from 2020 for either. That is why it is so important to also review the data for the West Coast Region. It has a similar trend to California, but we are seeing small increases from almost all of the other west coast states also.

Lastly, of course, we have looked at the largest aggregate possible for our purposes - Overall Out-of-State home buyers in Tennessee. This showed us that there is a statistically significant difference between the total out-of-state buyers of 2020 and 2021, with a difference of proportions of 7.56% (Table 1). When looking at with 95% confidence, we see that the proportion of out-of-state buyers to total buyers is between 20.51% and 25.06% for 2020 (Table 2). In 2021, the proportion changed to 27.61% and 33.07% with 95% confidence (Table 3). To see that the upper limit of the confidence interval for 2021 is almost one-third of the total number of Tennessee home buyers is an eye-opening stat. Looking at Graph 1, we can easily see the trend. The regions and states with statistically significant changes from 2020 to 2021 are doing so at high rates, especially when we consider the fact that 2020 was a year that had already experienced the onslaught of these out-of-state buyers. From then on to 2021, things have magnified.

## Industry Expert Opinions

As I have mentioned, I work in the mortgage lending industry, and interact with buyers, sellers, realtors and all other interested parties on a daily basis. Experienced buyer's agents specifically know the market better than most. They represent people from all walks of life that are attempting to purchase a home in the Tri-Cities area. They speak with them about their motivations, desires, and work with all kinds of different financial and socio-cultural backgrounds.

In addition to my empirical data, I wanted to survey a couple of experienced realtors to see what their thoughts are on the current market and what can/should be done. I compiled a short list of questions and gathered responses from two realtors that do substantial amounts of business.

They believe that out-of-state buyers are both an important and relevant topic. They believe buyers are tired of being taxed heavily, under-represented politically, and desire more space and buying power. Both realtors saw this influx of buyers as a positive opportunity - people who own houses are seeing rapid appreciation due to demand, and that increase in housing prices will begin to trigger a barrier to entry for migrants only worried about getting a cheap house. Those willing to pay the new, higher prices are very motivated to live in this area for more than just economic reasons. Both real estate agents I corresponded with mentioned political leanings as one of the most important reasons, if not the most important reason for home buyers to uproot their families and move to this region. The political trend, although often talked about, is very difficult to support with empirical data. However it is quite interesting to see experts who sell homes on a daily basis mention this as a key driving force.

They were also optimistic about buyers being able to bring new businesses to the area (D. Lampkins, personal communication, October 27, 2021). The fact that Tennessee has no state income tax cannot be overstated in this context, and the ideas and ways of life from other parts of the country are much more conducive to economic growth under a lighter tax burden.



Many of the homes in Northeast Tennessee are also free of city property taxes. This is a benefit of living in an area that is rural and technologically connected at the same time.

When I asked them how they are adjusting to out-of-state buyers (in the ways of marketing, cultural barriers, etc.) they were fairly vague. One said that they were not sure that they had done much in the way of adjusting, and were just trying to “keep up” with demand and business. The other said they have relied primarily on being a “people person” and an outgoing nature that quickly finds out and suits the needs of the client individually (M. McCrory, personal communication, November 1, 2021). Neither individual made any special mention of advertising and marketing directed specifically towards these out-of-state buyers. Resources have grown, and Jeff Fleming has undertaken a great deal of work to market to these buyers, incorporating the website [MoveToKingsport.com](http://MoveToKingsport.com) and tracking “hits” and the state those prospective buyers are currently living in (Move To Kingsport).

Overall, these real estate agents felt strongly that there is a significant amount of out-of-state buyers in this area. They also believed that the market is improving and we will grow economically because of it (coupled with lower taxation for business owners). An interesting note would be their emphasis on the political inclinations of those leaving their original homes and states to live here in Northeast TN. This is a dynamic factor that indicates a “squeeze” of underrepresentation of conservative values in other states (namely California, which has had a sharp and statistically significant increase in people leaving her for Tennessee).

## Conclusion

This thesis has carried the goal of exposing and examining the role of out-of-state home buyers in our Tri-Cities market. While conducting the research for this paper and talking to involved parties, I have found that, both empirically and experientially, this influx is real. The data collected and analyzed has helpful information and insights regarding where the significant changes and shifts are coming from. The West Coast region, Non-Border states, and Overall Out-of-State have seen the most undeniable increases from 2020 to 2021. This tells me that the trend towards us as a real estate destination is national - not just regional. The insignificance of the Border States and East Coast change from 2020 to 2021 tells me that, as we have suspected, there are still a large amount of in-state purchases and purchases from nearby states, but they are not increasing at the same rapid pace. Further, more removed areas like California and the West Coast have seen unmistakable increases, from a baseline that was most likely much higher than years prior to 2020.

Through available resources and other forms of data mentioned (such as the Wall Street Journal), I have found that the nation as a whole has recognized that Northeast Tennessee and the Tri-Cities area is becoming a new haven for people from all across the country. My collaboration with realtors from this area (experts in their field who work with homes and out-of-state clients on a regular basis), has taught me that there is indeed real world experience to back up the data that I have uncovered. Overall tax burden, political affiliation, cost of living, and the simple comfort of the mountains has drawn many people from far and wide already.

If this research is any indication of the future, I expect to see even more migrants in the coming years. From that point on, we will need to shift and focus our academic and empirical research on how this will affect natives to the area in one, five, ten years down the road.

## Bibliography

Move To Kingsport Homepage. Move To Kingsport. (n.d.). Retrieved November 8, 2021, from

<https://movetokingsport.com/>.

Hayes, H. (2021, February 5). Tri-cities housing market posts double-digit increases.

timesnews.net. Retrieved October 28, 2021, from

[https://www.timesnews.net/news/business/tri-cities-housing-market-posts-double-digit-increases/article\\_2968f4de-670a-11eb-8978-1fba15c42ea.html](https://www.timesnews.net/news/business/tri-cities-housing-market-posts-double-digit-increases/article_2968f4de-670a-11eb-8978-1fba15c42ea.html).

Politically extreme counties may act as magnets, migration patterns suggest. PSU Institute for

Computational and Data Sciences | High Performance Computing at Penn State. (2019,

December 3). Retrieved October 28, 2021, from

<https://www.icds.psu.edu/politically-extreme-counties-may-act-as-magnets-migration-patterns-suggest/>.

U.S. Energy Information Administration - EIA - independent statistics and analysis. PADD

regions enable regional analysis of petroleum product supply and movements - Today in

Energy - U.S. Energy Information Administration (EIA). (n.d.). Retrieved November 6,

2021, from <https://www.eia.gov/todayinenergy/detail.php?id=4890>.

Ewalt, D. (2021, July 20). WSJ News exclusive | see the full rankings for WSJ/Realtor.com's

emerging housing markets index. The Wall Street Journal. Retrieved October 28, 2021,

from

<https://www.wsj.com/articles/see-the-full-rankings-for-wsj-realtor-coms-emerging-housing-markets-index-11626756019>.