

Voting With Your Feet: Finding Your Place to Go



1. Introduction

Where you live matters. It orients everything from your daily commute to the boundaries of your social circle. Your location also nests you within certain key institutions, which structure and shape how others govern and tax you.¹ At the same time, most people feel powerless to change the characteristics of the institutions in which they reside. While you can vote for candidates that seem to match your preferences, your single vote won't decide an election. On the national level, there's about a one in 60 million chance your vote will make a material difference in the outcome of an election.² While the odds are better for local elections, you are still just one vote among many, and your opinions and preferences can be swamped by those who disagree with you. As George Mason University law professor Ilya Somin points out, freedom feels more meaningful when you have the ability to make a decisive choice.³ One in 60 million feels like a false choice, and can cause despair of ever finding a place where you feel free.

¹ See generally, <https://www.econlib.org/library/Topics/College/economicinstitutions.html>

² Somin, Ilya. Voting with Our Feet, Cato Institute, 20 Sep. 2021, www.cato.org/commentary/voting-our-feet

³ Somin, *ibid.*

Fortunately, there is another way, and that is by voting with your feet.

2. The Tiebout Model: Voting with your feet

The phrase “voting with your feet” has been used by people across the political spectrum, from Vladimir Lenin⁴ to Ronald Reagan.⁵ Put simply, it means expressing your preferences for government by moving to a place that already has the institutions you want. For example, many Black southerners voted with their feet in the 20th century during The Great Migration, moving from the Jim Crow south to the less oppressive institutions of the north.⁶ More recently, Jeff Bezos moved from liberal Washington state to conservative Florida to avoid paying \$600 Million of Washington state capital gains taxes.⁷ Conversely, Ilya Somin speculates that the recent US Supreme Court ruling that overturned *Roe v. Wade*, and the subsequent state-by-state variability in abortion regulation, may induce some people to move from conservative pro-life states to liberal pro-choice states.⁸ While these moves are made for a wide spectrum of reasons, they all represent people getting the government institutions they prefer by physically moving somewhere else instead of trying to reform the institutions they leave behind.

The academic study of foot voting was first modeled by economist Charles Tiebout in his seminal 1956 article *A Pure Theory of Local Expenditures*.⁹ Tiebout first proposed the idea as a student in a graduate seminar taught by University of Michigan Professor Richard Musgrave.

⁴ Wintringham, Tom. “The Road to Caporetto,” *Left Review* 2, no. 2 (November 1935): 63-5 <https://www.marxists.org/archive/wintringham/1935/11/caporetto.htm>.

⁵ Ronald Reagan. “Interview With Reporters on Federalism,” 19 November 1981, <https://www.reaganlibrary.gov/archives/speech/interview-reporters-federalism>.

⁶ “The Great Migration (1910-1970).” *National Archives and Records Administration*, 28 June 2021, www.archives.gov/research/african-americans/migrations/great-migration.

⁷ Holley, Kayla, and Laraia, Max. “Mansionmaxxing: Statisnostics Uncovers the Financial Motive behind Jeff Bezos’s Recent Move to Miami Beach, FL.” *StatisNostics*, Substack, 29 July 2024, statisnostics.substack.com/p/mansionmaxxing-statisnostics-uncovers.

⁸ Somin, Ilya. “Abortion and Foot Voting in a Post-Dobbs America - Australian Institute of International Affairs.” Australian Institute of International Affairs, March 23, 2023. <https://www.internationalaffairs.org.au/australianoutlook/abortion-and-foot-voting-in-a-post-dobbs-america/>.

⁹ Tiebout, Charles M. “A Pure Theory of Local Expenditures.” *Journal of Political Economy* 64, no. 5 (October 1, 1956): 416–24. <https://doi.org/10.1086/257839>

Musgrave argued that the only mechanism for determining the level of public goods¹⁰ in a community is political (i.e. through voting at the ballot box). Tiebout countered by proposing a nonpolitical alternative where consumers shopped around to find the community that best fit their preferences¹¹. Tiebout then developed this idea in his 1956 paper.

The Tiebout Model assumes that each potential resident of a municipality has a specific preference pattern for public goods, and a limited tolerance for how much tax they will pay to obtain them. Public goods include things ranging from high-achieving schools, municipal golf course access, or reliable police protection.¹² Based on their subjective ranking of these preferences, each potential resident searches for the community that best satisfies their preferences and moves there. Having a greater number of communities to choose from and a greater variance between preferred characteristics shows them where to go. People sort themselves until an equilibrium is reached in which no one can gain from moving to a different community.

On this optimality, or equilibrium, Tiebout remarks that, “Just as the consumer may be visualized as walking to a private market place to buy his goods, the prices of which are set, we place him in the position of walking to a community where the prices (taxes) of community services are set. Both trips take the consumer to market. There is no way in which the consumer can avoid revealing his preferences in a spatial economy. Spatial mobility provides the local public goods counterpart to the private market's shopping trip”.¹³

¹⁰ Public goods are goods that are nonrivalrous and nonexcludable. Put more simply, they are goods where your use of the good does not protrude on my use of the good and excluding me from using the good is difficult. Classic examples include roads, public parks, and national defense. For more information, see <https://www.econlib.org/library/Enc/PublicGoods.html>.

¹¹ Fischel, William A. “Footloose at Fifty: An Introduction to the Tiebout Anniversary Essays,” THE TIEBOUT MODEL AT FIFTY: ESSAYS IN PUBLIC ECONOMICS IN HONOR OF WALLACE OATES, Lincoln Institute of Land Policy (April 17, 2006): 1-20. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=895609.

¹² Tiebout, pg. 418

¹³ Tiebout, pg. 422

One notable aspect of the Tiebout Model is that communities do not change their expenditure levels to match what their residents want: the residents who want the existing expenditure levels move there instead. Those opposed to the level of taxing and spending just move out. This is an extreme assumption, and there is some experimental evidence suggesting that both foot voting and traditional voting are necessary to achieve an efficient outcome¹⁴. The simple Tiebout model, like Marshallian economics, also functions most clearly with assumed perfect information. In reality, no prospective resident can be 100% informed about all the benefits and drawbacks of living in a particular community. Tiebout himself mentions that many difficult to measure non-economic factors, including the “niceness” of a neighborhood’s people, can trigger a decision to move.¹⁵ Tiebout’s Model nevertheless isolates a crucial insight, which is that potential residents of a community are rational actors who will shop around for the best place to live, just as they shop around in any other market.

3. The Tiebout Model Tested

The Tiebout Model received little attention when it was first introduced. Tiebout himself abandoned working on the model following his appointment to a teaching position at the University of Washington, where he stayed until his death in 1968.¹⁶ It wasn’t until 1969, when Princeton University economics professor Wallace Oates published a paper testing the Tiebout Model that it began to get significant recognition¹⁷. Oates compared New Jersey residential communities located within the New York metropolitan region, gathering data on effective property tax rates and various proxy measures of the quality of the region’s housing stock and government services, including housing prices. Oates found that, holding public output¹⁸

¹⁴ Robbett, Andrea. “Local Institutions and the Dynamics of Community Sorting.” *American Economic Journal Microeconomics* 6, no. 3 (August 1, 2014): 136–56. <https://doi.org/10.1257/mic.6.3.136>.

¹⁵ Tiebout, pg. 418

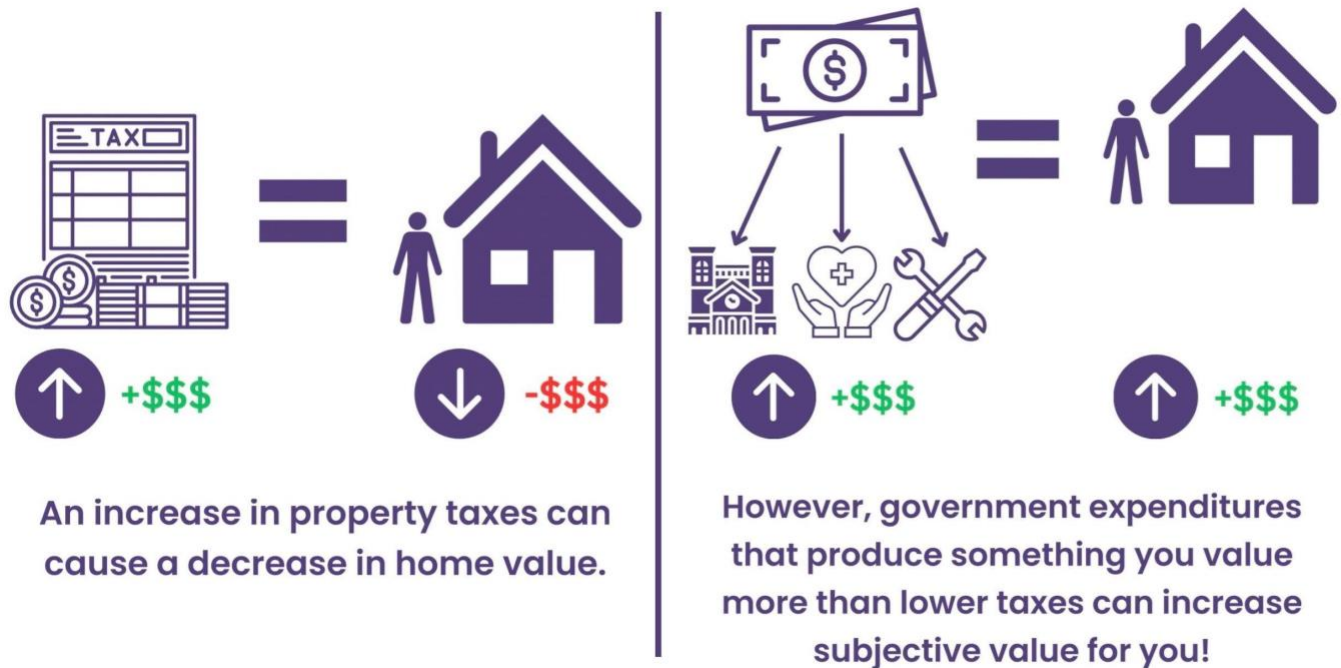
¹⁶ Fischel, 5

¹⁷ Oates, Wallace E. “The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis.” *Journal of Political Economy* 77, no. 6 (November 1969): 957–71. <https://doi.org/10.1086/259584>.

¹⁸ “Public output” is defined as the amount of government services offered.

constant, a 2 to 3 percent increase in local property tax rates reduces the market value of a house by about \$1,500. However, an increase in expenditure per pupil from \$350 to \$450 *increases* the market value of a house by about \$1,200, almost completely offsetting the tax increase! Oates concluded that, dependent on what the extra tax money is spent on, it is possible that a tax increase may be completely offset by the increased expenditure on government services that deliver public goods to induce higher housing values.

Oates postulated that local governments can create competition between municipalities to offer the optimal public goods package in exchange for the optimal levels of taxes extracted to fund them. Since property values are sensitive to changes in both tax rates and public service expenditures, the Tiebout Model says consumers do in fact appear to ‘shop around’ for public services and then move to optimum locations.¹⁹



¹⁹ Oates, Wallace E. “The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis.” *Journal of Political Economy* 77, no. 6 (1969): 957–71. <https://doi.org/10.1086/259584>.

The annual count of citations for Tiebout's 1956 article more than doubled in the decade following Oates' article, and the model is now foundational for theoretical and empirical research on local government.²⁰ Another notable test of the model was performed on Michigan households in 1982 by University of Michigan economists Edward Gramlich and Daniel Rubinfeld. Using survey data of Detroit metropolitan area household public expenditure demand²¹, they examined whether households with similar demands were living in the same communities. If so, Tiebout's predicted "sorting" behavior of these households would be confirmed. The Michigan study found that the overwhelming majority of those surveyed lived in a community where the variance of the within-community public expenditure demand was smaller than the variance for the overall metropolitan area. In other words, statistical evidence verified that people with similar demands for public goods were in fact living in the same communities.²²

A more recent Ohio homeowner study by University of Cincinnati professor David Brasington analyzed survey data to compare stated community preferences to actual housing choices. Brasington found that when people say they want their community to have certain characteristics, like good schools or low taxes, they are more likely to purchase homes in municipalities offering those preferred characteristics.²³ While this seems obvious, the more interesting thing in Brasington's study is the supporting data it uses to identify which preferred community factors are prioritized by various demographic groups. For example, respondents who prioritized living in a low-tax area tended to be younger than average, while older people were less averse to living in a high-tax area. Surprisingly, only 2% of respondents cited

²⁰ Fischel, 5

²¹ Another way of saying their demand for public goods.

²² Gramlich, Edward M., and Daniel L. Rubinfeld. "Micro Estimates of Public Spending Demand Functions and Tests of the Tiebout and Median-Voter Hypotheses." *Journal of Political Economy* 90, no. 3 (June 1, 1982): 536–60. <https://doi.org/10.1086/261073>.

²³ Brasington, David M. "What Types of People Sort to Which Public Services?" *Papers of the Regional Science Association* 96, no. 3 (February 9, 2016): 537–54. <https://doi.org/10.1111/pirs.12210>.

environmental quality as one of their two top characteristics. Regardless of which specific characteristic they identified, new homeowners by and large voted with their feet to buy a house in an area reflecting that characteristic.

4. Challenges with voting with your feet

Although voting with your feet is an academically respectable exercise, putting the Tiebout theory into personal practice can be a challenge. First, there are many external barriers that make foot voting difficult. Zoning restrictions can drive up housing costs in what would otherwise be a desirable place to live. Residentially assigned school districts can limit the amount of choice some families have by placing a greater burden on private school choices, due to the “double taxation” of paying taxes for the public schools they don’t use and tuition for the private school they do use. School choice programs, some of which allow families to use their vouchers on private schools, can partially solve this issue,²⁴ but few parents currently have this option. Structural rigidities like these become their own disincentive factors that may countervail or submerge a positive preferred factor with functionally stochastic extra costs.

The second biggest challenge with foot voting is that local governments are not offering individual services you can pick and choose from, but instead a bundle of services. While Tiebout did compare foot voting to the marketplace in his 1956 paper, economist Arnold Kling points out that the marketplace for local government looks more like buying a cable TV package than buying groceries.²⁵ Just as you have to buy the whole TV package instead of only the channels you want, you also have to buy your municipalities’ subpar snow removal services if you want its superb K-12 schools. The Tiebout model also doesn’t address the many non-governmental features that are involved in the choice to move from one place to another. While

²⁴ Somin, Ilya. Voting with Our Feet, Cato Institute, 20 Sep. 2021, www.cato.org/commentary/voting-our-feet.

²⁵ Kling, Arnold. “Market Failure in Government.” Askblog, December 12, 2012. <https://www.arnoldkling.com/blog/market-failure-in-government/>.

Tiebout mentions that the “niceness” of a neighborhood as a non-governmental factor that matters when choosing a place to live, proximity to family, friends, jobs, and entertainment are all just as, if not more important than the quality of government when it comes to foot voting.

Given how complex choosing where to move is, it is difficult to make a well-informed decision. There are challenges when it comes to accessing high-quality information, which can be both difficult to find and costly to obtain. Internet searches, while convenient, can be distorted by bad data, flawed sources, and paywalls. Furthermore, even after obtaining the relevant information it can be difficult to compare across communities to accurately map your options to relocate.

5. Using SatisCation to vote with your feet

The SatisCation Life Satisfaction Index (LSI) addresses some of these challenges by making it easier to vote with your feet for both governmental and non-governmental reasons. The LSI score measures how different locations might impact your life satisfaction by using your own subjectively ranked preferences. By leveraging over 45 disparate public databases, SatisCation generates an LSI score for any address in the United States, calculated based on the user’s personal choice of preferred location factors. These scores are standardized such that they can be compared across addresses.

Users select the lifestyle factors that matter most to them and rank them according to their personal preferences. This customization ensures that the LSI score reflects what is important to each individual, providing a tailored evaluation of each potential location. This score then helps individuals understand how well a location aligns with their personal preferences. SatisCation allows users to pick their top five factors from a sample of 14.

To illustrate, let’s start with “Jim” and “Mary” who have chosen their top 5 factors, ranked in differing subjective preference order below:

Preference Ranking	Jim	Mary
1	Housing Affordability	Education Quality
2	Culture and Lifestyle	Safety
3	Climate	Food Availability
4	Transportation Accessibility	Culture and Lifestyle
5	Political Preference	Housing Affordability

Created with Datawrapper

Next, Jim and Mary provide demographic data to integrate these 5 factors into their own unique LSI scores: Jim is a mid-20s young professional with his first job out of school; and Mary is a middle-aged married woman with two school-aged children. Both are looking for a place to live, and both have different preferences: Jim is prioritizing affordable housing, warm weather, and living somewhere where there is a lot to do, while Mary is prioritizing good schools for her children and living in a safe area. To gather information about alternate places to live, Jim and Mary enter their data on the SatisCation website.²⁶

²⁶ www.satiscation.com

Demographic Factor	Jim	Mary
Age	19-30	41-50
Gender	Male	Female
Climate Preference	Warm	Moderate
Average Household Income	\$40,001-\$80,000	\$120,001-\$160,000
Political Affiliation	Democrat	Republican
Housing Preference	Rent	Buy
Community Type Preference	Urban	Suburban

Created with Datawrapper

Jim and Mary next enter any prospective address or city name in the country and get a personalized score that approximates what their life satisfaction would be if they lived at that location. Below are Jim and Mary's scores for various cities:

City, State (Zip Code)	Jim	Mary
Atlanta, GA (33036)	58	51
Bethesda, MD (20817)	45	72
Hickory, NC (28602)	85	60
Lincolnshire, IL (60069)	41	86
Macon, GA (31211)	93	41
McAllen, TX (78501)	85	58
Mount Airy, NC (27030)	36	84
San Luis Obispo, CA (93405)	39	12
Tallahassee, FL (32304)	90	42

Created with Datawrapper

Jim and Mary's LSI scores are notably different across these select cities. Jim's LSI score is higher for Macon or Tallahassee, due to more affordable housing and warm weather. Neither city would suit Mary well, due to both having low education quality scores. With Mary's preferences, her LSI score is better in Lincolnshire or Mount Airy, but neither place would appeal to Jim. Even within the same state we see variation: Hickory and Mount Airy are both located in North Carolina, but Jim would prefer Hickory and Mary would prefer Mount Airy. Jim and Mary can then use these insights to vote with their feet: Jim will likely go to Macon, while Mary will likely go to Lincolnshire.

By synthesizing community data and preferences into simple, easy-to-understand metrics, SatisCation empowers people to more effectively vote with their feet. With this new tool,

we can go beyond the strict mathematical tax indices used in many Tiebout Model scenarios and help people get one step closer to flourishing in a more satisfactory location.