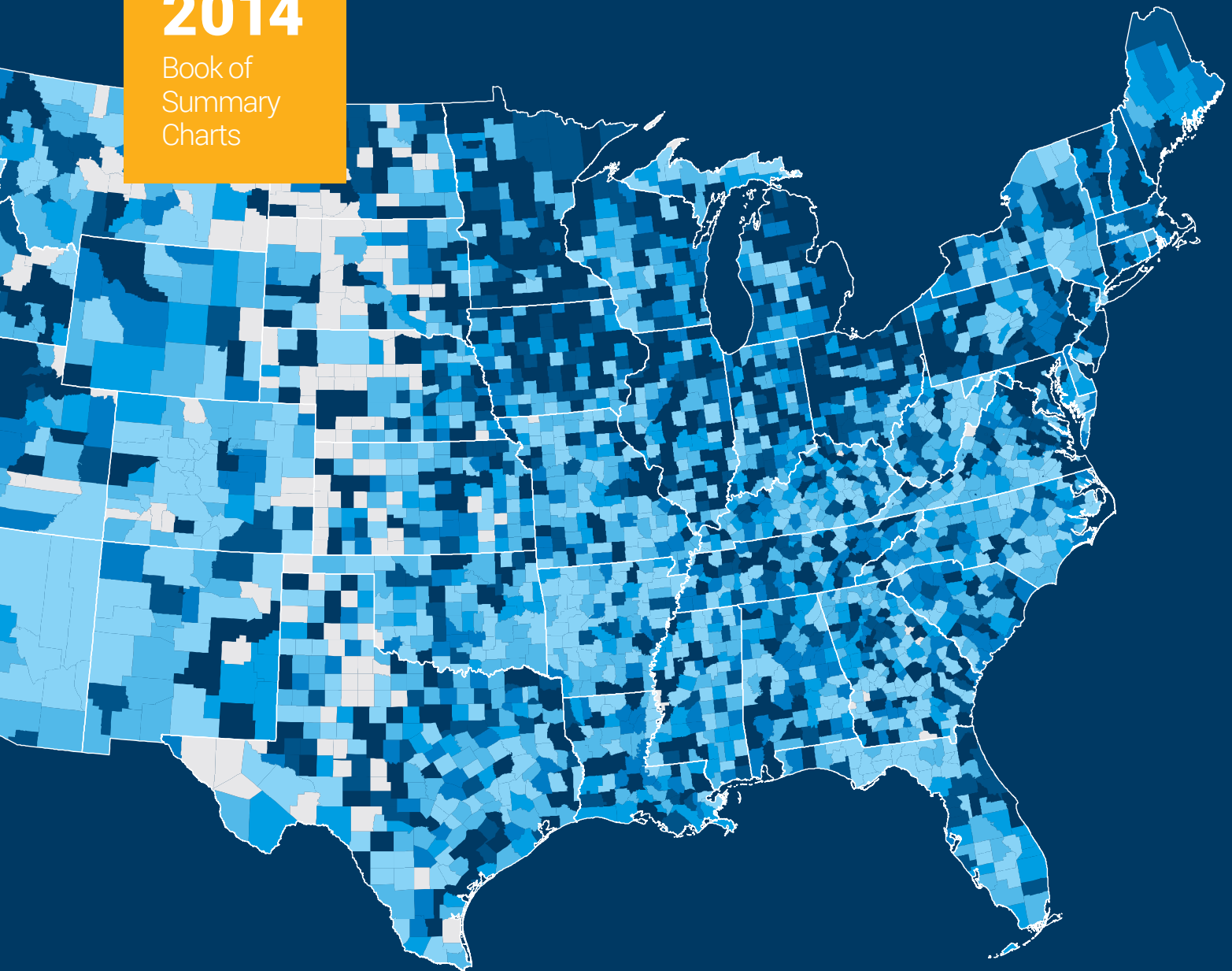


2014

Book of
Summary
Charts



COMMUNITY CREDIT

A New Perspective on America's Communities



FEDERAL RESERVE BANK *of* NEW YORK

COMMUNITY CREDIT

A New Perspective on America's Communities

2014 Book of
Summary Charts

FOREWORD



William Dudley, President and CEO
Federal Reserve Bank of New York

Fostering the economic and financial well-being of communities is both a personal and an institutional commitment. I make it a priority to routinely visit and speak to a variety of stakeholders throughout our district. During these trips, I hear firsthand from individuals of diverse backgrounds about the challenges they and their communities face and the efforts that are under way around the region to help address those challenges.

To help support these efforts, the New York Fed is uniquely positioned to provide objective research and analysis on community development

issues. Without credible benchmarks to make transparent comparisons, support needs assessments, and otherwise inform policies and programs, sensible choices are hard to achieve or monitor over time.

For this reason, I am particularly pleased with the work presented in this volume, *Community Credit: A New Perspective on America's Communities 2014 Chart Book*. This tool was developed by our staff in consultation with philanthropic, nonprofit, and government partners to ensure relevance of focus and accessibility of information. Every effort was made to provide big data insights as clearly and inclusively as possible, such as by including data for relatively small or rural communities that might otherwise be overlooked or missed.

The feedback on *Community Credit* has been positive and I hope that community development leaders and professionals will continue to find it valuable. I am pleased that the New York Fed produced this work as part of our ongoing efforts to support community development through regional outreach.

ACKNOWLEDGMENTS

Many individuals generously shared their time and expertise to help make this project more robust, relevant, and accessible to practitioners, policymakers, funders, technical experts, and other community stakeholders. The conversations deepened our knowledge of community issues, decision-making processes, and governance systems. Their questions and comments prodded us to sharpen our thinking and critically reexamine our analytics to make the information more grounded in the realities of community life and focused on community concerns. That said, in no way do these individuals bear responsibility for any remaining shortcomings.

We particularly wish to thank the following people:

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We also thank our colleagues at the Federal Reserve Bank of New York, Andrew Haughwout, SVP, Wilbert van der Klaauw, SVP, Donghoon Lee, Research Officer, and Joelle Scally, Research Associate, for valuable input as we developed the Community Credit framework. We also thank Mike Gedal and Stephanie Rosoff for data assistance, Nina Leiser for design assistance, and Namrata Kalola for mapping and infographics and the layout of the volume. Last but not least, we thank Dona Wong and the New York digital strategy team for creating the web-based data interactive with detailed maps, which may be found at www.nyfed.org/communitycredit.

The views presented here are those of the authors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.

PREFACE

Interest in regional and community-level data has grown steadily in recent years. Community policymakers, funders, practitioners, technical experts, and other stakeholders are increasingly using data to support efforts to better understand community needs and interests and to inform policy responses.

While data are no substitute for good judgment and experience, data analytics are critically important in the following ways:

- **To identify and understand the financial circumstances and needs of communities:** Data are a useful way to describe local conditions and to communicate both needs and successes to leaders and key stakeholders. Metrics allow communities to be compared with each other, either as peers or potential competitors. Within a community, changes in local conditions can be tracked over time to measure local progress.
- **To develop policies and identify effective practices:** Data can help prioritize resources among competing policy objectives by assessing the cost-benefit trade-offs of alternative policy strategies. For example, data metrics are useful for comparing local needs and supporting the targeting of resources to communities where needs are most severe. Data analysis also facilitates the identification of lessons learned, which can be used to improve the efficiency of programs with regional customizations and to make mid-course policy adaptations.
- **To evaluate programs and assess community impact:** Indicators of residents' well-being, coupled with metrics of program-specific outcomes, are useful for gauging the broader effectiveness of policy actions and social programs. Increasingly, investors and funders are requesting greater accountability from their grantees in the form of performance metrics with which to assess progress over time.

As data are increasingly incorporated into routine policy development and decision making, micro-data can play a valuable role in broadening our attention to include frequently underserved and under-resourced communities. To be useful, the data analytics need to realistically reflect the concerns and realities of residents of these communities. Keeping it practical and relevant were important goals for us.

Through the use of credit bureau data, we undertook this project to develop metrics about community credit well-being. The metrics, presented as a series of heat maps, are descriptive, not prescriptive, in that they describe what is rather than what should be. The maps are data snapshots of credit behaviors most relevant to regional and community leaders in achieving their public service goals. Using a common methodology and a longitudinal representative anonymized sample, we were able to obtain comparisons over time and across communities.

We view this project as the start of a conversation. The maps and metrics are available on the New York Fed's website (<http://www.nyfed.org/communitycredit>) and are complementary to the household-debt research by others.

The response from community stakeholders continues to be very encouraging. It is interesting to see the wide range of applications that the metrics lend themselves to, and the discussions are just starting. We have learned much from our conversations as to what is more or less valuable and how to improve the tool to better fill knowledge gaps. At present, our plans are to update the data in the interactive once a year, when the year-end data become available. We are pleased to contribute to and be a part of the conversation on a very important topic.

Kausar Hamdani, PhD | Senior Vice President

Claire Kramer Mills, PhD | Community Affairs Officer

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1

OVERVIEW

Community Credit was inspired by the recovery efforts of communities following Super Storm Sandy in 2013 when some communities seemed to fare better than others. Thinking more broadly than disasters, we asked, which factors are important for a community's well-being and access to economic opportunity?

An important part of the answer is residents' ability to access resources, whether to actualize dreams or to meet unexpected financial needs for whatever reason. When focusing on personal financial resources, the traditional approach is to examine measures of household income and net assets. This framing, however, is incomplete; it omits access to credit as a financial asset even though the ability to borrow is an important way to tap future financial resources for today's use.¹

Also, the traditional practice of using summary statistics of median or average household income and wealth to characterize communities misses the underlying heterogeneity of residents and their ability to access resources in support of themselves and their community's well-being.

Lastly, data on household balance sheets are not always available on a timely basis, if at all, especially for smaller communities.

WHAT IS COMMUNITY CREDIT?

Community Credit is a new way to understand the financial well-being of communities by examining local credit outcomes.² In our framework, we view households' access to credit as an asset that allows them to respond to unexpected financial needs and pursue economic opportunities.³

We also assume that individuals' credit experiences not only describe their personal situations but also say something, in the aggregate, about the well-being of their community. Specifically, we describe the financial well-being of communities by examining the local credit environment—or what we call the *local credit economy*. We define the local credit economy to include all adults in a geography, age eighteen or older, who have a credit file and a credit score at a major credit reporting agency. We then characterize the local credit economy with outcome-based measures of credit access, use, and stress.

- 1 A recent study on cash flow gaps that households need to manage found that "the typical household did not have a sufficient financial buffer to weather the degree of income and consumption volatility observed in the data." The authors found that the typical middle-income household needed approximately \$4,800 in liquid assets but had only \$3,000; credit could be one way to smooth income. See *Weathering Volatility: Big Data on the Financial Ups and Downs of U.S. Households*, JPMorgan Chase & Co. Institute, May 2015, p. 5.
- 2 The Community Credit paradigm is complementary to the traditional approach and can enrich our understanding of the familiar credit data.
- 3 Aliza Gutman, Thea Garon, Jeanne Hogarth, and Rachel Schneider identify similar needs for their core elements of financial health in *Understanding and Improving Consumer Financial Health in America*, Center for Financial Service Innovation, March 24, 2015. Available at <http://www.cfsinnovation.com/CMSPages/GetFile.aspx?guid=bea17b32-b3c8-4fbc-8d24-e55b8900dba6>.

While our inquiry was inspired by Super Storm Sandy and the economic resilience of communities, further research is needed to establish causal links between those factors and economic resiliency. To lay the groundwork for such a discussion, we are providing place-based descriptors of credit outcomes calculated to permit consistent comparisons across time and geographies and selected to be relevant for regional and local policy and practice. Community Credit measures are complementary to familiar credit measures but also different in that the unit of interest is the community, not individuals per se.⁴ Also, the measures use residents' combined credit obligations⁵, not just select credit products and services.⁶ We also include payment histories of residents rather than point-in-time measures of delinquencies.

Data for all the maps and charts are from FRBNY Consumer Credit Panel / Equifax and the U.S. Census. Briefly, the data are quarterly, with values as of the end of each quarter. We use the term year-end to refer to 2013:Q4 or 2014:Q4 values; otherwise we are referring to the interim quarters of Q1, Q2, or Q3 of 2014. See the section *About the Data* for full details.

CREDIT FILES AS THE LENS TO DESCRIBE COMMUNITIES

Credit affects individuals' daily lives through various channels.

The traditional channel is individuals' access to credit and the associated costs of borrowing. Individuals with a history of on-time credit payments can obtain funds to finance special opportunities or access emergency funds when liquidity needs arise, both at reasonable rates and terms. Without such a history, individuals' credit options may be limited or credit may be available only on expensive terms, possibly through predatory channels, which can lead to prolonged cycles of mounting debt and even costly debt default.

- 4 Some practitioners have noted that the data can be used to paint a picture of what individuals are experiencing, which provides helpful reference points to develop community programming.
- 5 Information only from financial institutions that report to credit bureaus is captured in the data. Missing are credit activities from other credit sources such as friends and family, payday lenders, pawnshops, and other nontraditional lending channels.
- 6 Equifax is one of several credit reporting bureaus, each with their own methodologies and metrics. In the Credit Quality maps, we use the Equifax Risk Score 3.0. It was developed by Equifax and its values range from 280 to 850. Individuals with higher scores are viewed as better credit risks than those with lower scores. We use the following classification of scores: Scores less than 660 are considered subprime, scores between 660 and 719 are near prime, and scores 720 and higher are prime. Classifications vary and organizations with different credit scoring methods may identify the credit quality range and bands differently.

Another channel is the ability to access economic opportunities. For example, credit information is frequently used by employers, landlords, and cell phone companies to prescreen and qualify individuals; insurance companies sometimes use credit scores to determine premiums; and utilities and other companies may waive security deposits for those with established credit histories.^{7,8} Meanwhile, nonexistent or uneven credit histories may result in higher costs for services and impede, or perhaps even prevent, individuals' efforts to pursue some economic opportunities.

Community externalities may arise because individuals' credit behavior affects not only their personal situation but also that of their community. Households with timely access to affordable loans can buy, improve, or repair their homes, start a business, or manage large irregular payments for such items as water/sewer bills or property taxes, even when faced with adverse events such as job loss, medical emergencies, or the loss of wage earners through divorce or death. Additionally, individuals and families with successful credit experiences may share their credit knowledge with neighbors and be positive role models for financial empowerment.

Such synergies underlie our premise that credit-capable households are a source of strength for their communities and contributors to communal well-being.⁹ The link between individuals and communities was illustrated pre-crisis when it was widely observed that neighborhoods with relative concentrations of individuals with lower credit scores became the target of aggressive, even predatory, credit marketing and practices. While this study presents potentially useful indicators, more work is needed to formally establish links between the indicators and economic opportunity and well-being.

- 7 "The Fair Credit Reporting Act grants access to credit files for companies that have a 'permissible purpose.' This includes granting of credit, collection of debt, underwriting of insurance, employment purposes, issuing a license as required by some government agencies, and for a legitimate business transaction between a business and a consumer." From *Neb Guide*, published by the University of Nebraska Lincoln. Available at <http://extensionpublications.unl.edu/assets/html/g1799/build/g1799.htm>.
- 8 For an application of credit scores in the context of social relationships, see Jane Dokko, Geng Li, and Jessica Hayes, "Credit Scores and Committed Relationships," Finance and Economics Discussion Series 2015-081, Board of Governors of the Federal Reserve System, 2015. Available at <http://dx.doi.org/10.17016/FEDS.2015.081>.
- 9 Of course, individuals who choose not to use credit from traditional lenders or who choose not to be connected to the credit economy may also be a source of strength for their communities. Similarly, individuals who may not have strong credit histories should not be assumed to be a source of weakness or instability.

In order to quantify the credit strength of a community based on residents' collective credit behavior, we use the FRBNY Consumer Credit Panel / Equifax information to calculate several indicators. The indicators cover three ways that credit practices may enhance personal and community credit strength: 1) with payment histories and products that enable ready access to credit, 2) by managing credit obligations on time, and 3) by improving credit risk. Specifically, the heat maps and charts of the indicators are organized into three groups:

- **Inclusion:** What percent of the credit economy has credit practices that allow residents to access credit and be a source of community credit strength?
- **Stress:** What percent of the community has managed their debt obligations well, or experienced difficulties, during the four quarters of 2014?
- **Subprime Mobility:** On net, has the subprime segment of the community grown from year-end 2013 to year-end 2014? Was the growth or decline the result of net new entrants or net geographic relocations? Or was it the result of a net lowering of credit risk scores of individuals who continued to reside in that community?

Given our intention to provide place-based descriptors relevant for regional and local policy and practice, the inclusion and stress indicators may be viewed as describing the state of credit conditions in a community at year-end 2014; changes in these measures over time show directional movement for the community. (The data interactive at <http://www.nyfed.org/communitycredit> shows such shifts over time with color-coded heat maps.)

Another way to gauge movement over time is to calculate change directly. With that intention, we examine subprime mobility or the growth in the subprime segment of the community from year-end 2013 to year-end 2014. For subprime mobility, unlike the other indicators, we provide only a brief example of seven counties to illustrate the concept.

While all indicators are discussed in detail below, only select indicators are mapped in this book for U.S. states and counties in 2014 (where data availability permitted). However, all the indicators are available at the New York Fed's website (<http://www.nyfed.org/communitycredit>) in the form of a data interactive.

2

COMMUNITY CREDIT INDICATORS

INCLUSION

Community credit strength through individuals' access to credit

One indicator of individuals' access to credit from traditional channels is an established payment history in the form of a credit file and a credit risk score at a national credit bureau. Hence we start by defining the *credit economy* for a location as all adults (eighteen and older) with a credit file and an Equifax Risk Score provided by Equifax, a national credit reporting organization.

Our first indicator of inclusion is the relative size of the credit economy to the adult population. As the inclusion maps show, there is considerable variation among locations in the percent of residents included in the local credit economy.¹⁰ The credit-not-included maps are simply the converse of the included measure and are provided to more conveniently highlight where opportunities exist to responsibly broaden financial access to underserved households. The associated maps are in the Maps section labeled as follows:

- **Credit Included:** Percent of the Census adult population that is included in the FRBNY Consumer Credit Panel / Equifax database (i.e., has a credit file) and an Equifax Risk Score as of year-end 2014.¹¹
- **Credit Not Included:** Percent of the Census adult population that is not included in the FRBNY Consumer Credit Panel / Equifax database or is included but does not have an Equifax Risk Score as of year-end 2014.¹²

Being included in the local credit economy (i.e., adults having a credit report and an Equifax Risk Score) will not ensure that an individual may obtain credit at all or in a timely way. A tighter filter is the ability to obtain credit up to a limit without having to reapply and requalify for a new loan. Revolving-credit products such as credit cards or home equity lines of credit are such options, since they allow individuals to incur credit at their own discretion provided there is capacity within their credit limits.

¹⁰ See the section About the Data for details on the data sources and how the indicators are calculated.

¹¹ Due to differences between the FRBNY Consumer Credit Panel / Equifax information and the Census data, this measure is top coded at 100 percent.

¹² Due to differences between the FRBNY Consumer Credit Panel / Equifax information and the Census data, this measure is bottom coded at zero.

The following inclusion indicators make up our second pair:

- **Revolving Credit:** Percent of individuals in the credit economy with a credit card or home equity line of credit as of year-end 2014.
- **Utilization:** Percent of individuals in the credit economy who have 70 percent or more unused capacity on their credit lines as of year-end 2014.¹³

In addition to credit products, another indicator of individuals' ability to access credit is how they are viewed as customers by lenders. Residents with strong payment histories or high credit scores are two possible indicators of highly valued customers:

- **On-Time Payers:** Percent of credit economy residents who were current on all credit obligations for each quarter of 2014.¹⁴
- **Prime Credits:** Percent of credit economy residents with an Equifax Risk Score of 720 or higher as of year-end 2014.¹⁵

13 "Credit utilization rate has proven to be extremely predictive of future repayment risk. So it is often an important factor in a person's score. Generally speaking, the higher your utilization rate is, the greater is the risk that you will default on a credit account within the next two years. That's why it's always good advice to keep your credit card balances low—the lower the better. That helps ensure that your credit utilization rate stays low." From http://www.myfico.com/crediteducation/articles/fico_scores_credit_limit.aspx. While sources differ on the optimal utilization rate, 30 percent is frequently cited and is the value we use.

14 In other words, they were current on all credit obligations for one year as measured by quarterly data that are as of quarter-end.

15 As noted earlier, we use the Equifax Risk Score 3.0. It was developed by Equifax and its values range from 280 to 850.

STRESS

How credit-distressed is the community?

While the inclusion metrics dimension how many in a community are able to access credit and contribute to community credit strength, two variables—on-time payers and prime credits—foreshadow the issue of how well individuals are managing their credit obligations. Credit distress among residents may limit access to credit from traditional lenders and even deny residents economic opportunities, thereby affecting community strength. In practice, public, philanthropic, and nonprofit organizations widely use debt delinquency data to inform policy and program strategy, to allocate resources among programs and communities, and to track progress over time.¹⁶ In this section, we examine credit stress in more depth.

We use a five-category scale to characterize how well credit economy residents are managing their debt. All individuals in the credit economy are sorted by their quarterly payment history of their combined credit obligations from year-end 2013 to year-end 2014. Specifically, we ask:

- Is a person sixty or more days past due on any credit obligation as of year-end 2014?
- Was the person sixty or more days past due during any of the preceding four quarters?
- Was the person sixty or more days past due for all of the preceding four quarters?

Depending on the outcome,¹⁷ the individuals are categorized into one of five mutually exclusive stress categories in the following way:

Good History: Person was never sixty-plus days past due during any of the five quarters from year-end 2013 to year-end 2014. This category includes on-time payers described in the inclusion section plus individuals who briefly fell behind (for fifty-nine days or less during a quarter) but then caught up to be no more than fifty-nine days late on any credit obligation.¹⁸

Improved History: Person is current or no more than fifty-nine days late as of year-end 2014 but was sixty-plus days past due sometime during the preceding four quarters.

¹⁶ For example, financial empowerment of residents is widely undertaken as a necessary activity; however, it requires considerable local resources to achieve reputable and credible community efforts to promote credit education, including credit repair and building.

¹⁷ See the section About the Data for a diagram of this classification.

¹⁸ In other words, we do not classify them as having a clearly indicated credit problem since they simply may not pay bills promptly or are able to juggle payments among bills. Researcher Taylor Tepper reports that a NerdWallet survey found that "13% of the indebted copped to simply forgetting to pay their bills from time to time." See *Americans are Falling Further into Debt*, at www.time.com/money/4138675/americans-credit-card-nerdwallet/

Declining/Newly Delinquent History: Person is sixty-plus days past due as of year-end 2014, which is worse than his or her payment history during the preceding four quarters.

Struggling History: Person is sixty-plus days past due as of year-end 2014 and was sixty-plus days past due during some, but not all, of the preceding four quarters.

Consistently Delinquent History: Person was sixty-plus days past due during all quarters from year-end 2013 to year-end 2014.

The grid below summarizes the stress taxonomy, and all indicators sum to 100 percent for each locality:

Credit Stress based on Five Quarters of Payment History of Individuals				
Good History Current or only 30-59 days late	Improved History Improved from 60+ days late to current or no more than 59 days late	Declining History Deteriorated from current or only 30-59 days late to 60+ days late	Struggling History Was 60+ days late for some, but not all, of the period	Consistently Delinquent History Was 60+ days late for entire period

It is worth repeating that our credit stress metrics differ from the more familiar credit-product delinquency rates in at least three ways. First, we use five quarters of individuals' payment histories to assess credit stress. Second, we classify individuals as delinquent if they are overdue on any of their credit obligations. Third, we use sixty or more days overdue as the classifier for our stress buckets (not ninety or more days) because that is what the data suggested.

The table below illustrates how delinquency numbers can differ when we take the traditional product-based approach versus an all-obligations approach for the U.S. as of year-end 2014.

	U. S. Delinquencies : 60+ Days		
	Percent of Credit Product Holders 60+ Days Delinquent, 2014: Q4		
Types of Holders of Credit Products	Traditional measure: delinquent on credit product only, 2014: Q4	60+ days delinquent on any credit product, 2014: Q4	60+ days delinquent on any credit product during 2013:Q4 to 2014:Q4
Mortgage Holders	4	9	
Auto Loan Holders	8	17	
Student Loan Holders	16	25	
Credit Card Holders	12	14	
Community Credit: All Credit Products			19

The product-based measures of debt delinquency are consistently lower than the all-obligations measures (column 2 in the table above). This difference occurs because many individuals have more than one type of credit product and, when faced with financial stress, they often juggle payments, deciding which to make and which to fall behind on.

For example, anecdotally we heard that, historically, individuals prioritized keeping current on their mortgage payments. However, in the aftermath of the financial crisis, car payments became a higher priority for individuals who needed their cars to get to work while others prioritized credit cards to pay for daily living expenses. When payment history is taken into account, the delinquency measures may worsen further or not, depending on the net impact of the improved, declining, and struggling history values. In brief, the Community Credit stress measure is the more inclusive measure and illustrates that credit stress in a community may be understated when looked at only through the delinquency rates of single traditional credit products.

SUBPRIME MOBILITY

On net, has the subprime segment of the community grown, declined, or remained almost unchanged? If so, why?

A repeated request from community leaders is for ways to measure impact. The inclusion and stress measures may be used as level indicators of community conditions against which to compare a program's progress. For monitoring purposes, measures of change are also useful. One option to gauge impact is to focus on the net growth of the subprime segment of a community and then parse out the reasons driving the growth or decline.¹⁹ (It is worth noting that the subprime credits map in the inclusion section presents the size of the subprime segment of the community as of year-end 2014; in contrast, subprime mobility measures the rate of growth of this segment from year-end 2013 to year-end 2014.)

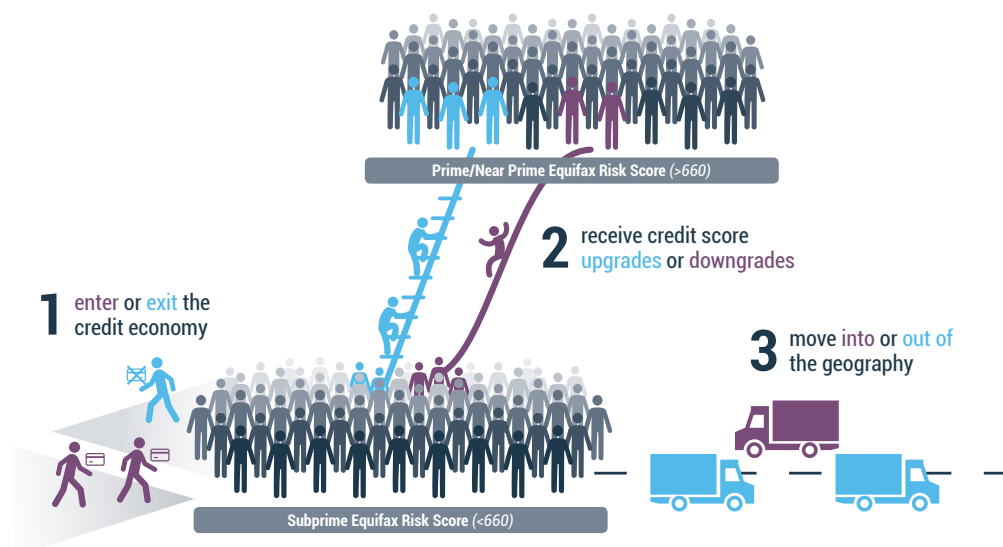
Specifically, we define subprime mobility as the net growth in the number of individuals with a subprime Equifax Risk Score (a value of less than 660) in a location from year-end 2013 to year-end 2014. The growth rate may be positive or negative.

¹⁹ We recognize that credit scores are not perfect measures of individuals' credit quality, but this approach should be viewed only as a first attempt to get at a difficult topic.

Since the source of change has different implications for policy and programs, we disaggregate the net growth into three mutually exclusive components. We define the change as due to 1) people newly entering or exiting the credit economy,²⁰ 2) people continuing to reside in the community and whose risk scores changed, and 3) people moving in or out of the community. More specifically, the three mutually exclusive drivers are as follows:

- 1 Net new subprime entrants (the new entrants):** The portion of subprime growth rate attributable to new additions to the community who have a subprime credit score, minus the subprime individuals who are no longer included in the credit bureau files.
- 2 Net risk-score changers (the stayers):** The portion of subprime growth rate attributable to people who stayed in the community and saw their credit scores decline below 660, minus those whose scores improved to 660 or higher.
- 3 Net geographic movers (the relocators):** The portion of subprime growth rate attributable to subprime residents relocating into the community, minus the subprime residents who moved away.

To illustrate these three components, we provide an infographic:



²⁰ That is, they show up as an entry in the FRBNY Consumer Credit Panel / Equifax database at year-end 2014 but were not there at year-end 2013.

3

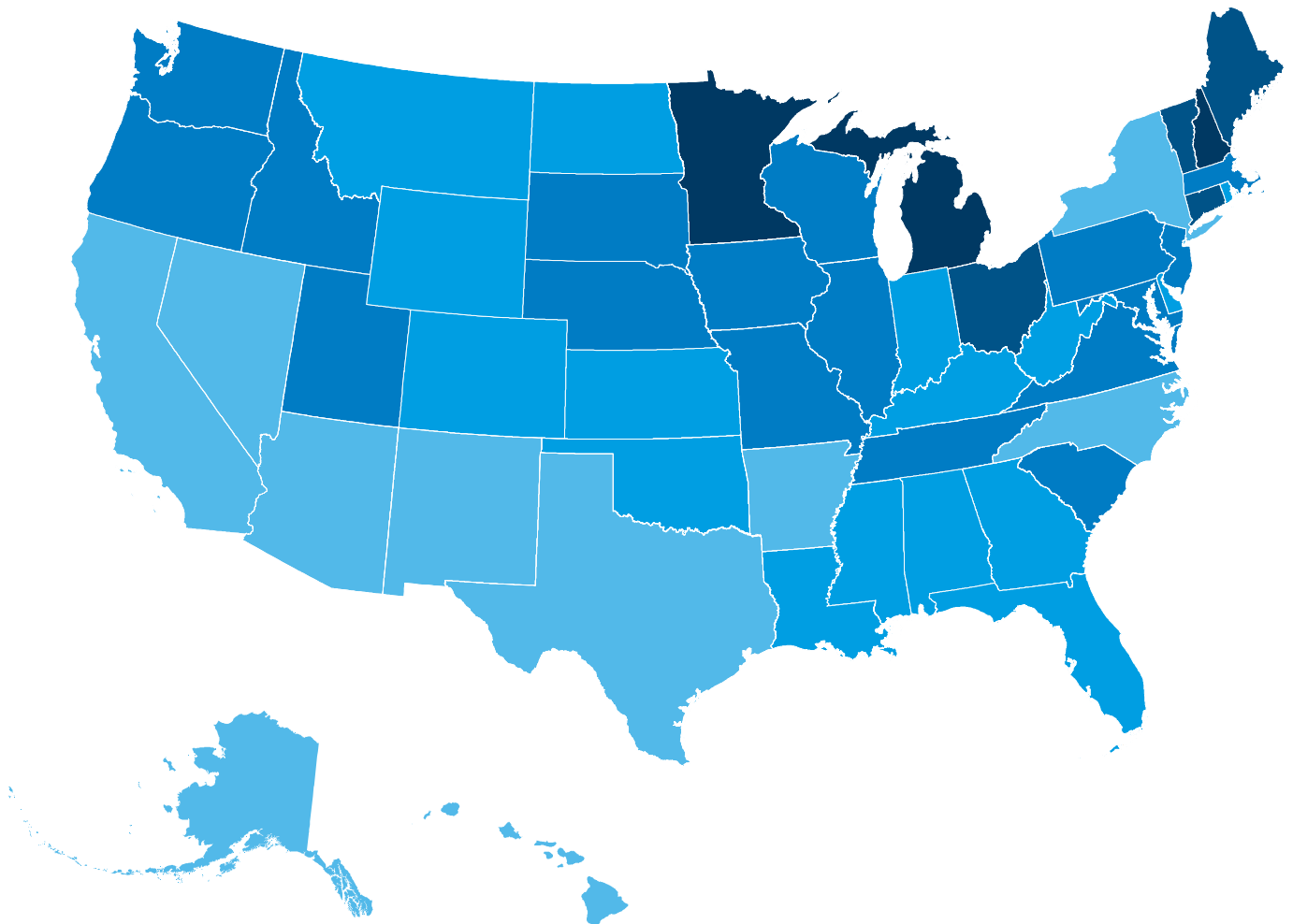
INCLUSION MAPS

CREDIT ECONOMY / INCLUDED

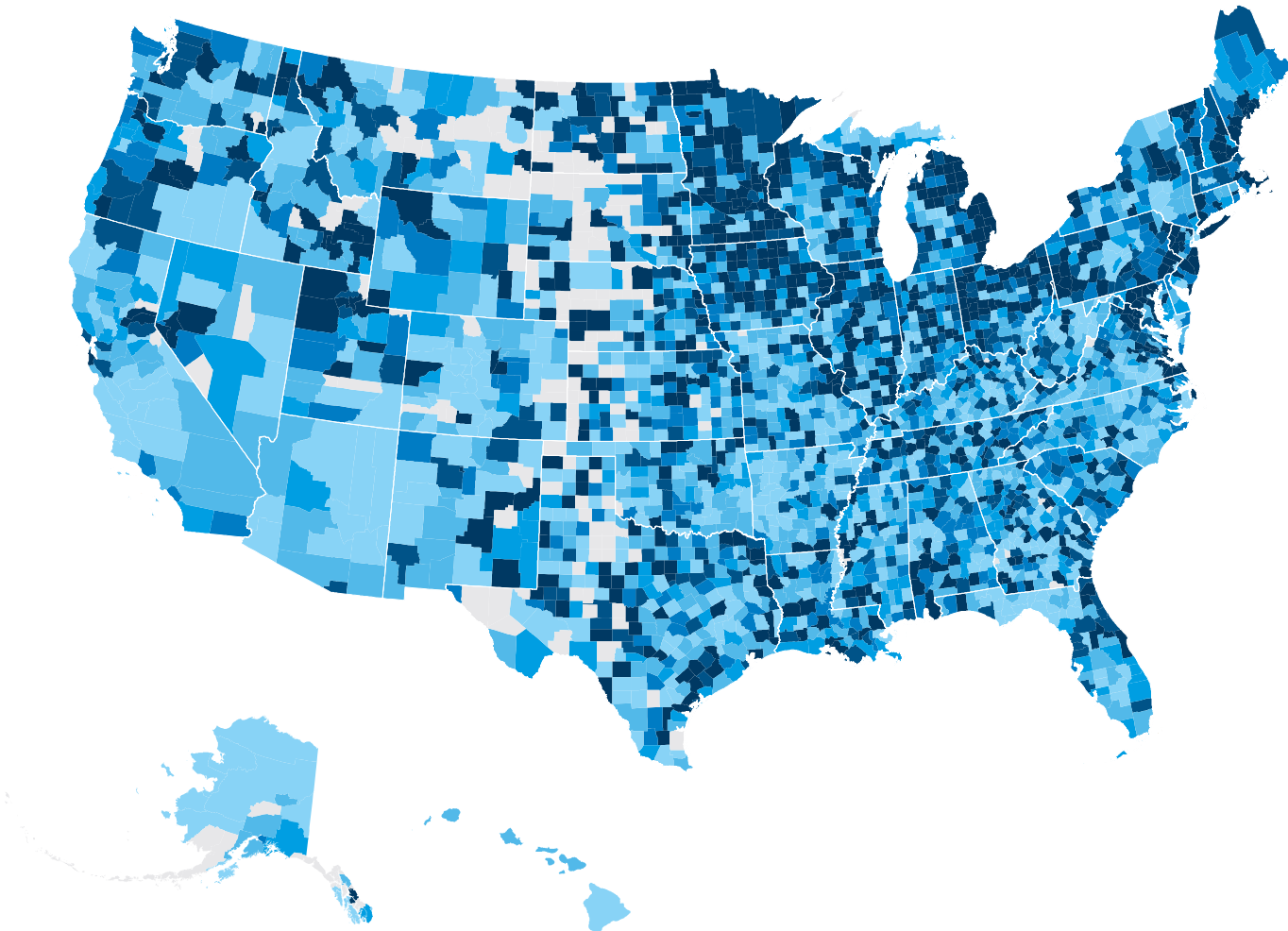
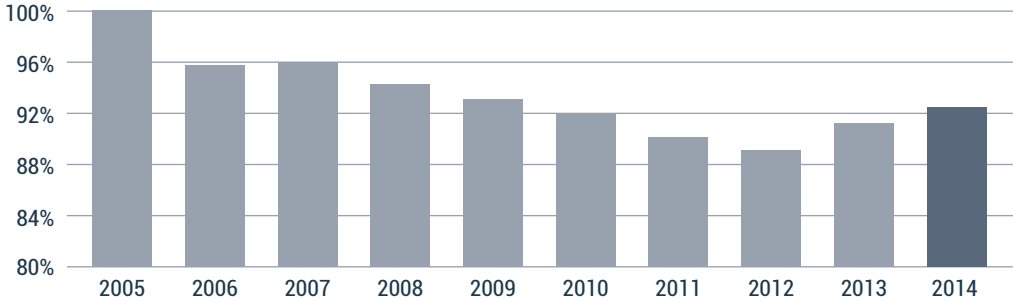
The INCLUDED metric is intended to show what percent of local residents have access to credit from traditional financial lenders. One way to measure credit inclusion is to identify the credit economy, which is defined as the percent of adult residents in a geography, age 18 years or above, who are estimated to have a credit file and a credit score with a major credit reporting organization. See About the Data for details.

The bar chart shows INCLUDED values for the U.S., 2005–2014. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



U.S. Credit Economy, Included Credits, 2005–2014



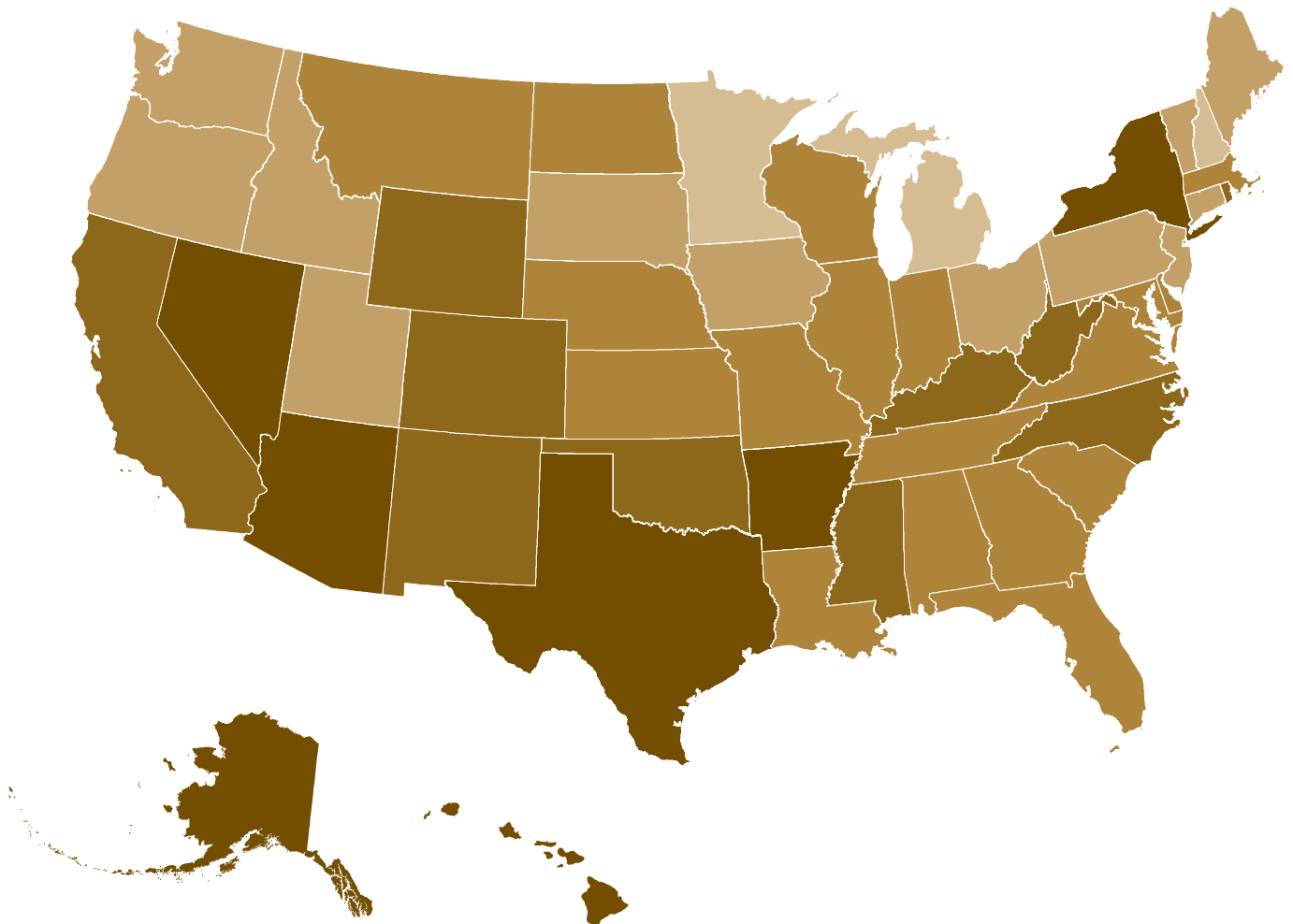
Data Source: FRBNY Consumer Credit Panel / Equifax

CREDIT ECONOMY / NOT INCLUDED

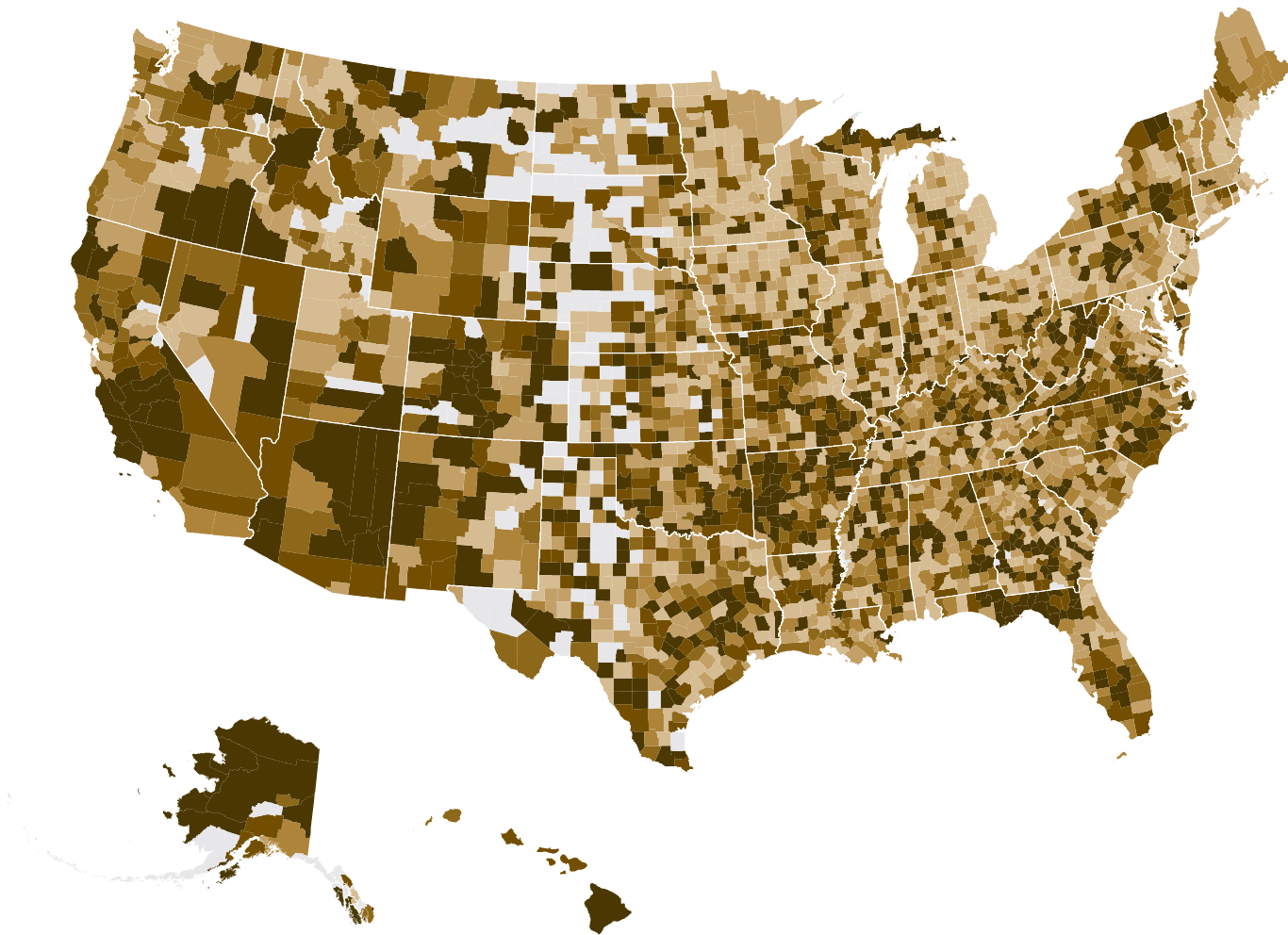
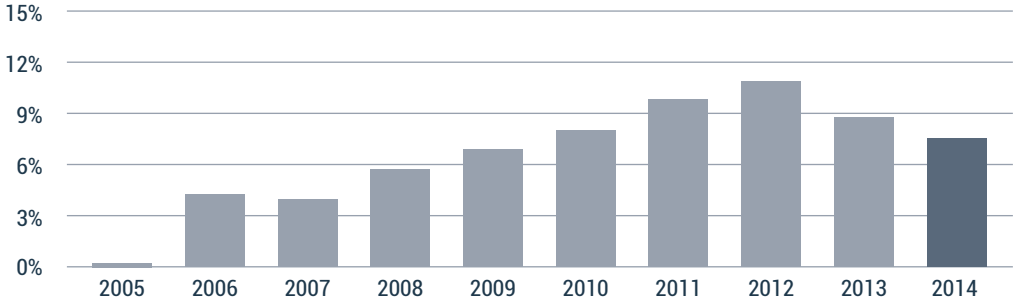
The NOT INCLUDED measure is simply the residual of the INCLUDED measure. It is presented for the convenience of stakeholders whose focus is on those who are not part of the credit economy.

The bar chart shows NOT INCLUDED values for the U.S., 2005–2014. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



U.S. Credit Economy, Not Included Credits, 2005–2014 (Revised)



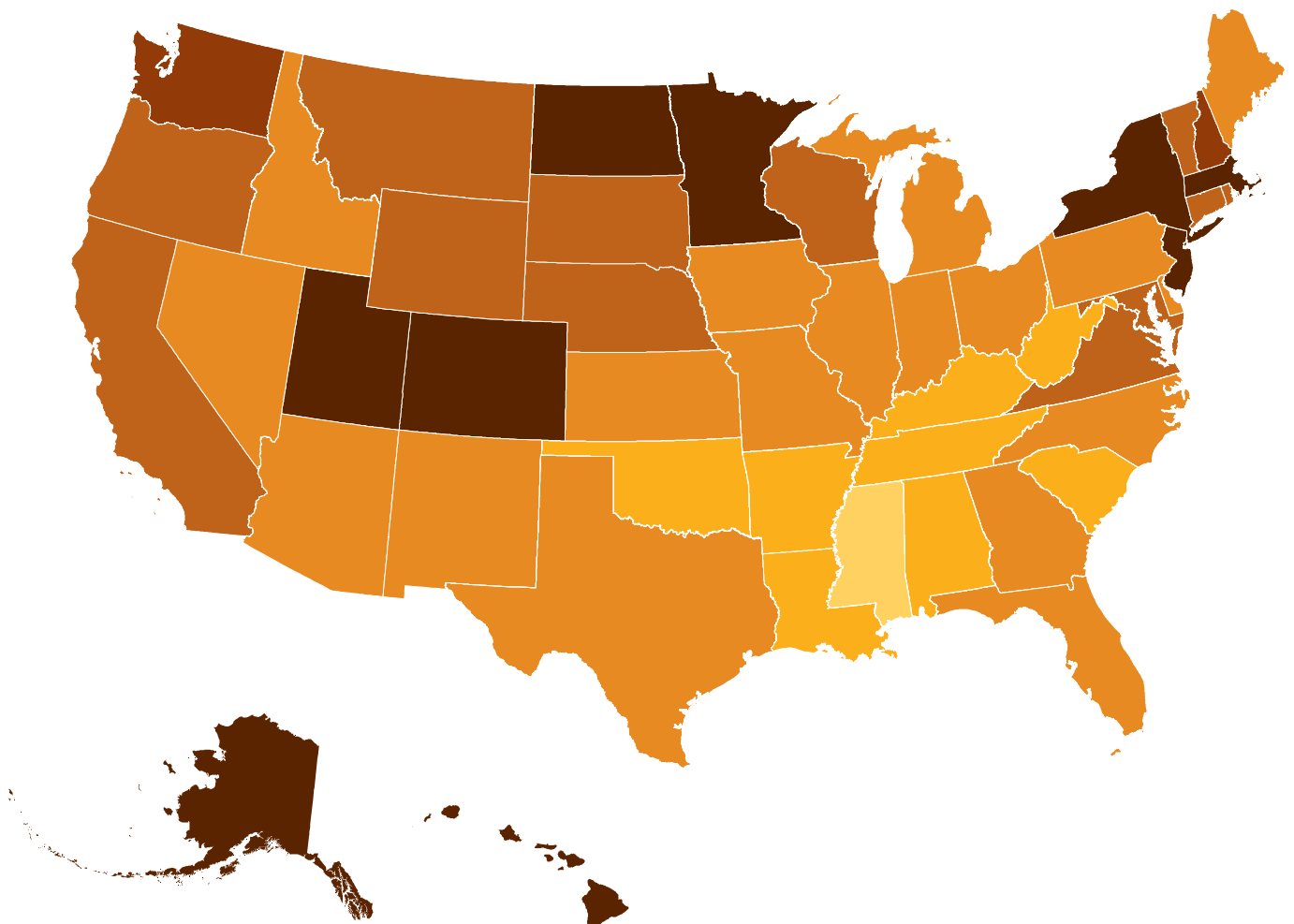
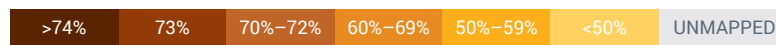
Data Source: FRBNY Consumer Credit Panel / Equifax

AVAILABLE CREDIT / REVOLVING CREDIT

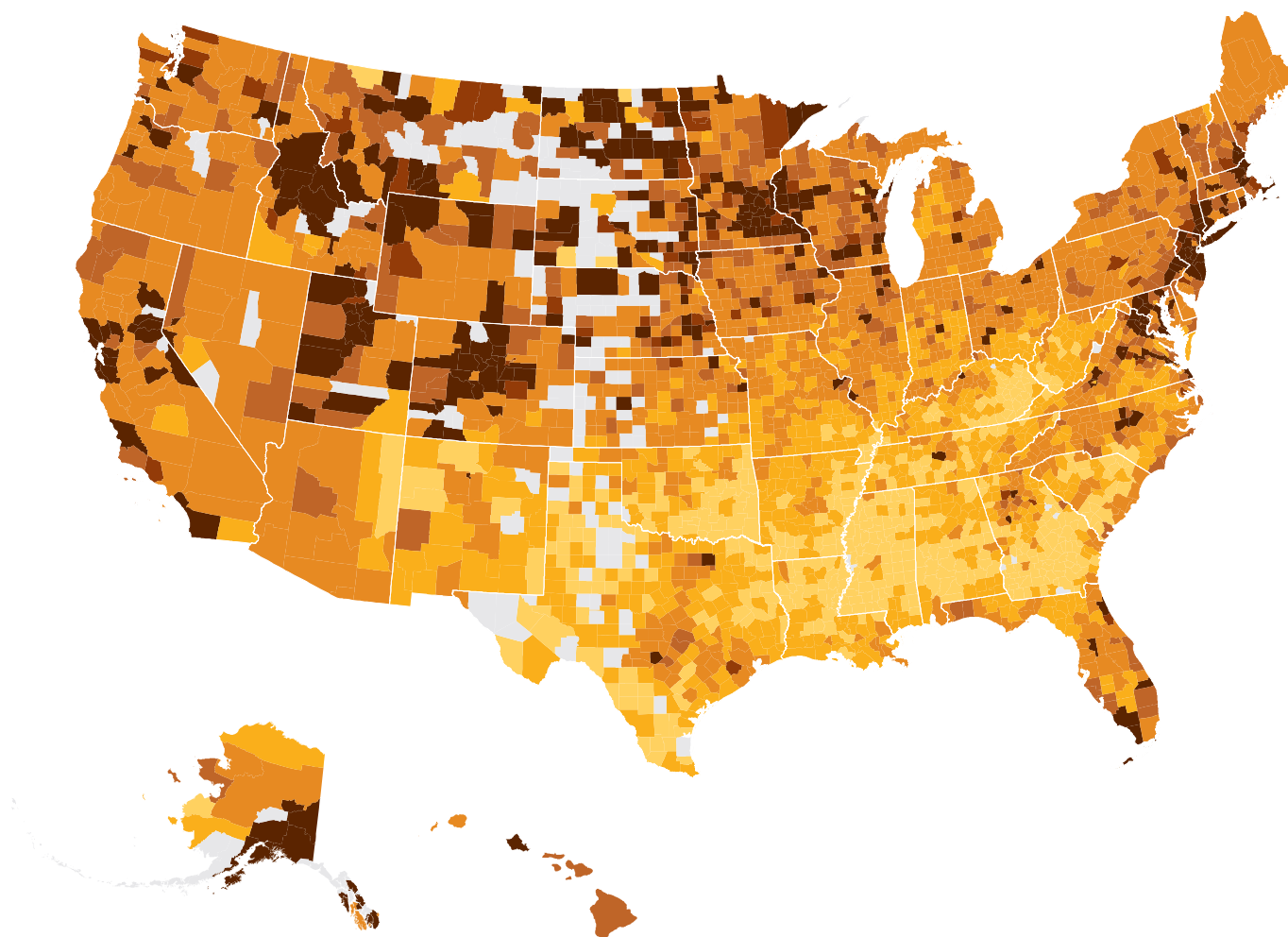
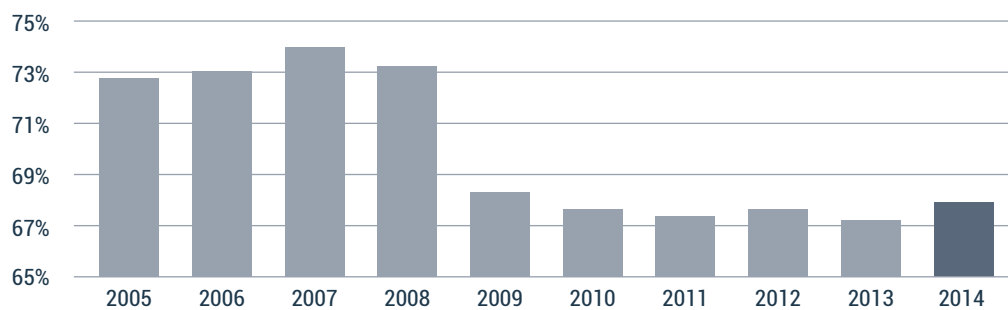
Being included in the local credit economy will not ensure that an individual may obtain credit at all or in a timely way. The REVOLVING CREDIT indicator measures the percent of individuals in the credit economy who are able to obtain credit, up to a limit and without having to reapply and requalify for a new loan, through the use of revolving-credit products such as credit cards or home equity lines of credit.

The bar chart shows REVOLVING CREDIT values for the U.S., 2005–2014. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



U.S. Credit Economy, Revolving Credit, 2005–2014



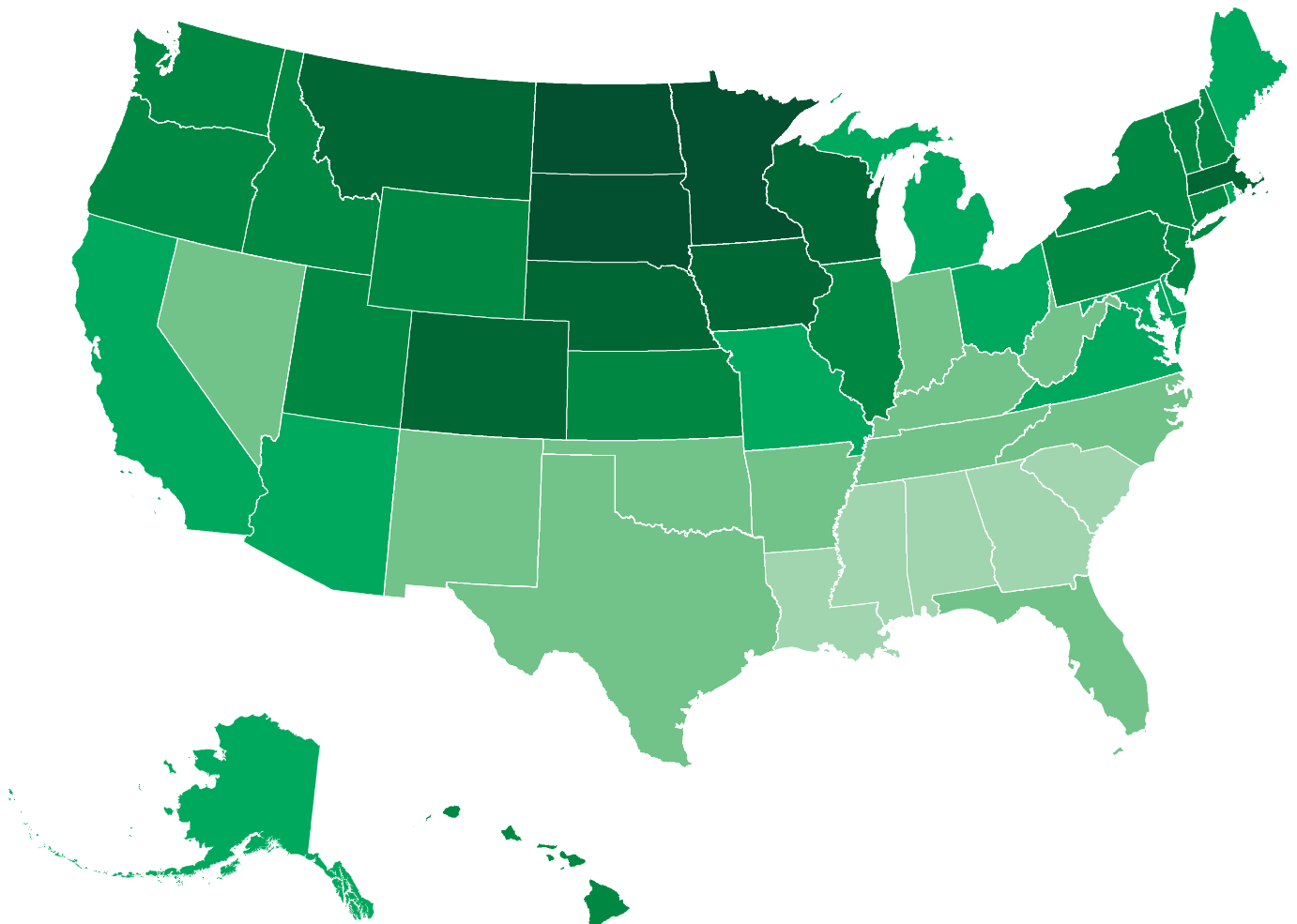
Data Source: FRBNY Consumer Credit Panel / Equifax

AVAILABLE CREDIT / UTILIZATION

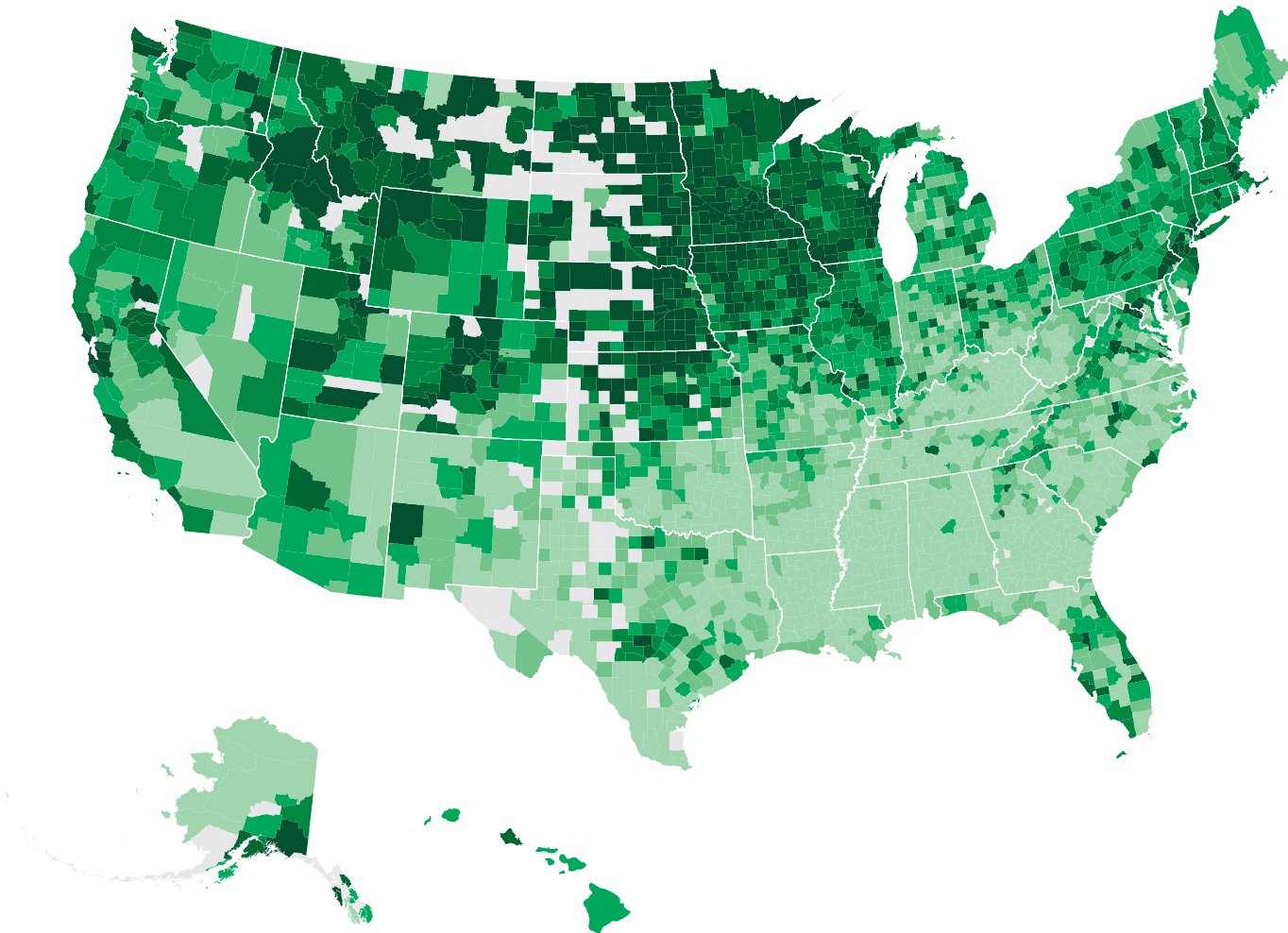
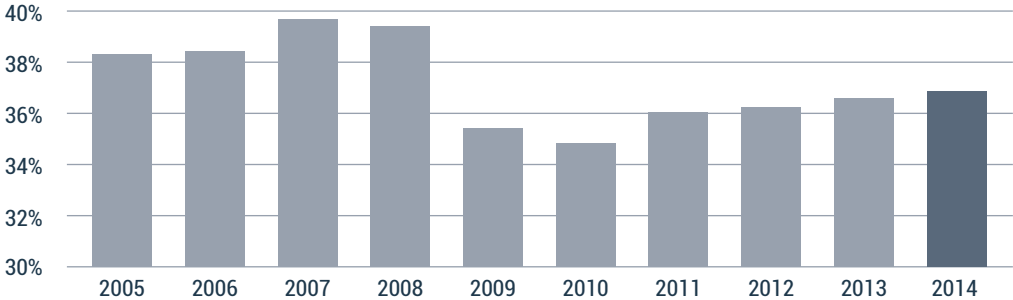
Revolving credit options may be used to incur credit at one's own discretion provided there is capacity within their credit limits. The UTILIZATION measure calculates the percent of individuals in the credit economy who have 70 percent or more unused capacity on their credit lines as of the year-end in discussion.

The bar chart shows UTILIZATION values for the U.S., 2005–2014. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



U.S. Credit Economy, Utilization, 2005–2014



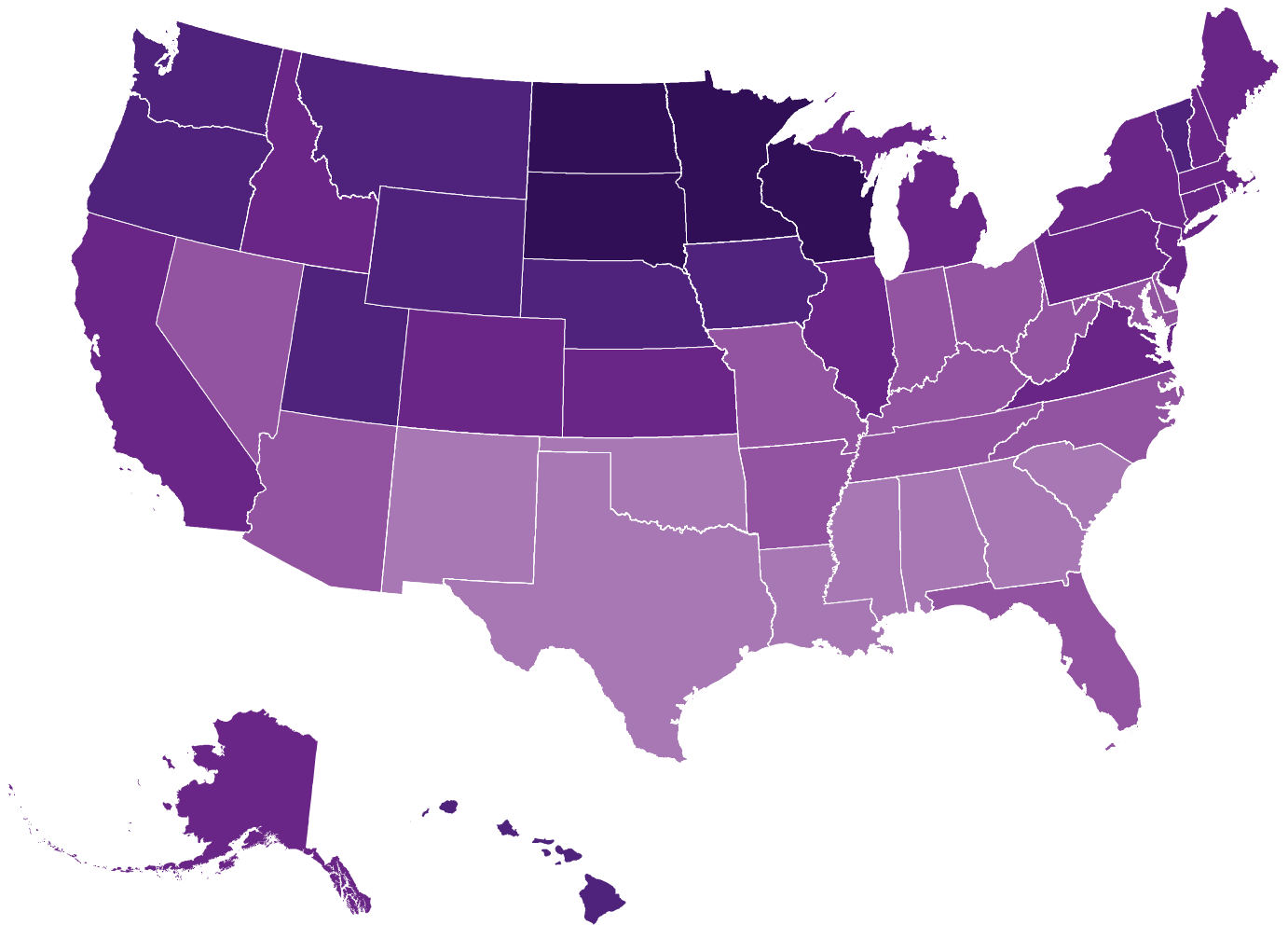
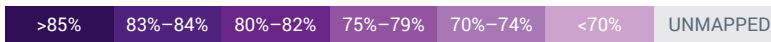
Data Source: FRBNY Consumer Credit Panel / Equifax

CREDIT QUALITY / ON-TIME PAYERS

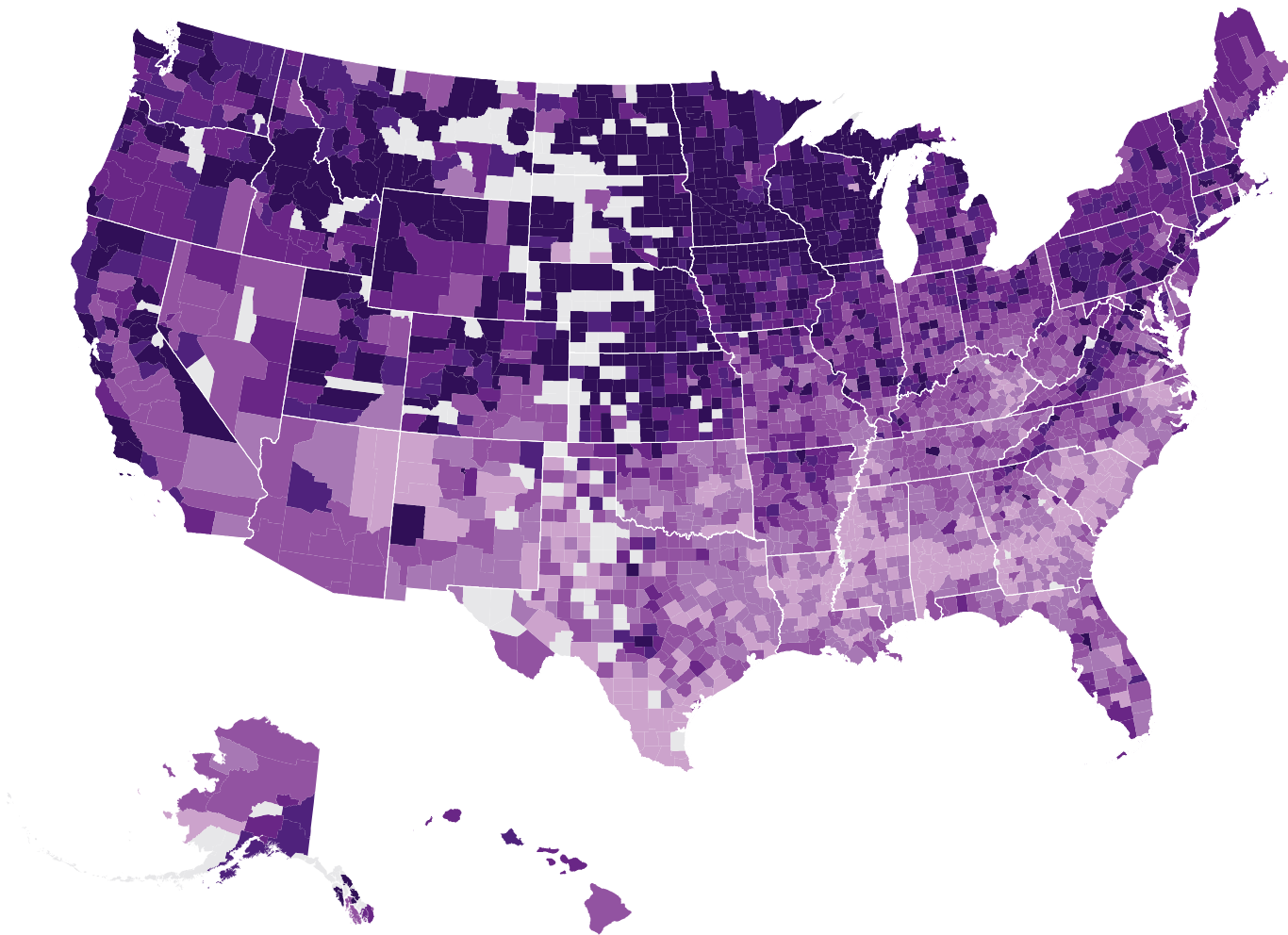
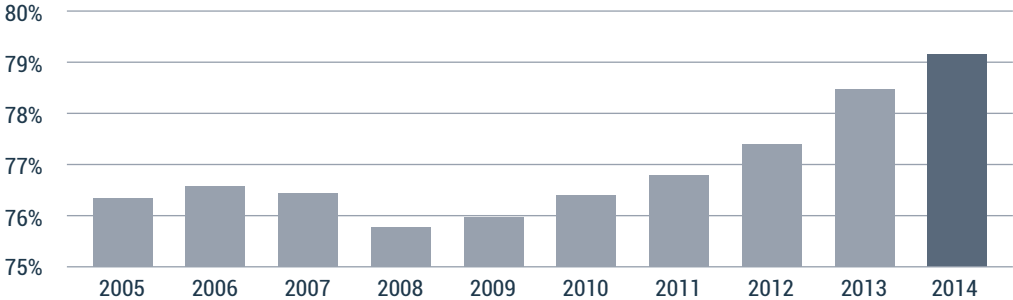
Another indicator of individuals' ability to access credit is their payment history. The ON-TIME PAYERS indicator measures the percent of credit economy residents who were current on all credit obligations for each quarter of the calendar year.

The bar chart shows ON-TIME PAYERS values for the U.S., 2005–2014. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



U.S. Credit Economy, On-Time Payers, 2005–2014



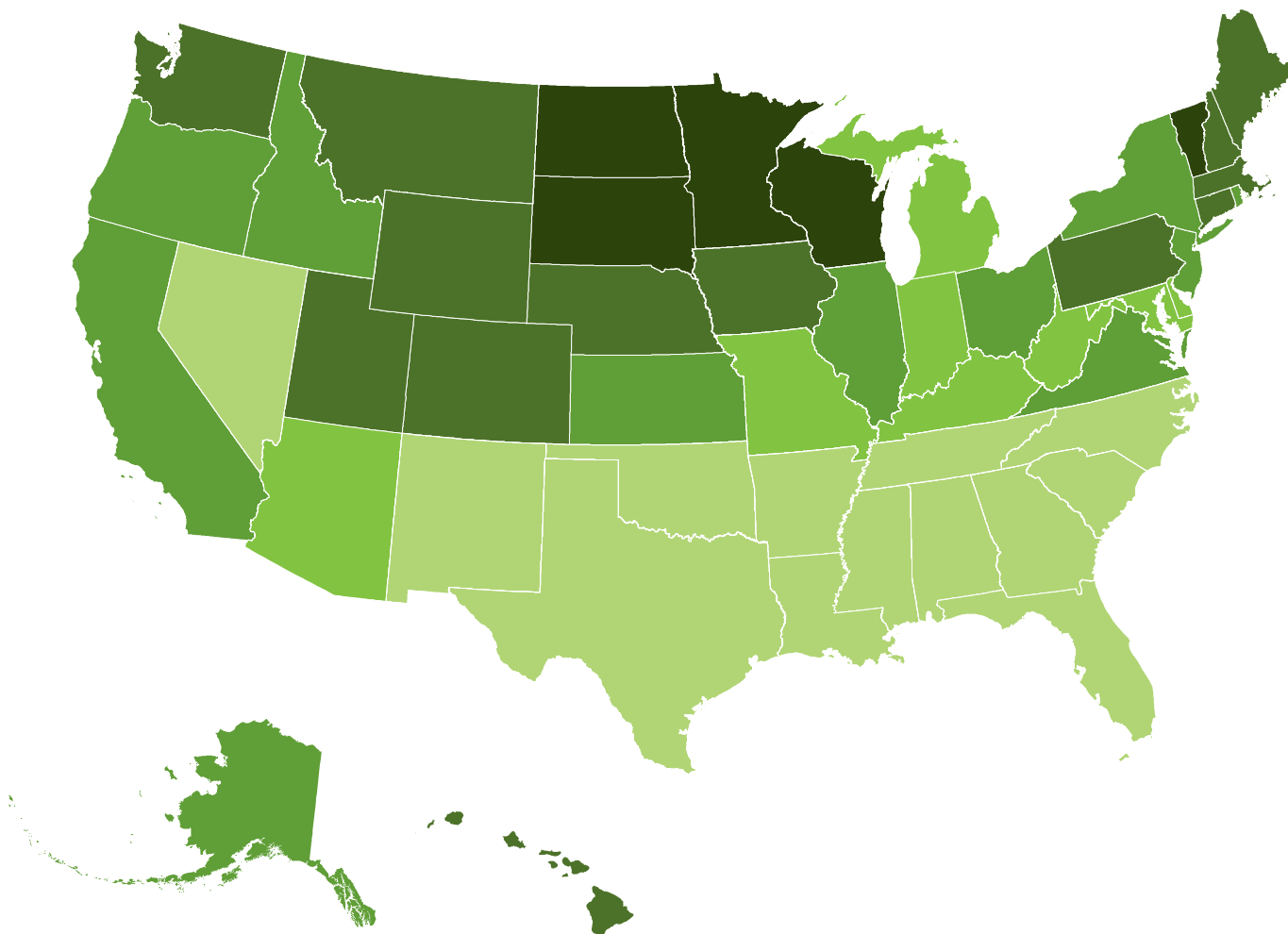
Data Source: FRBNY Consumer Credit Panel / Equifax

CREDIT QUALITY / PRIME CREDITS

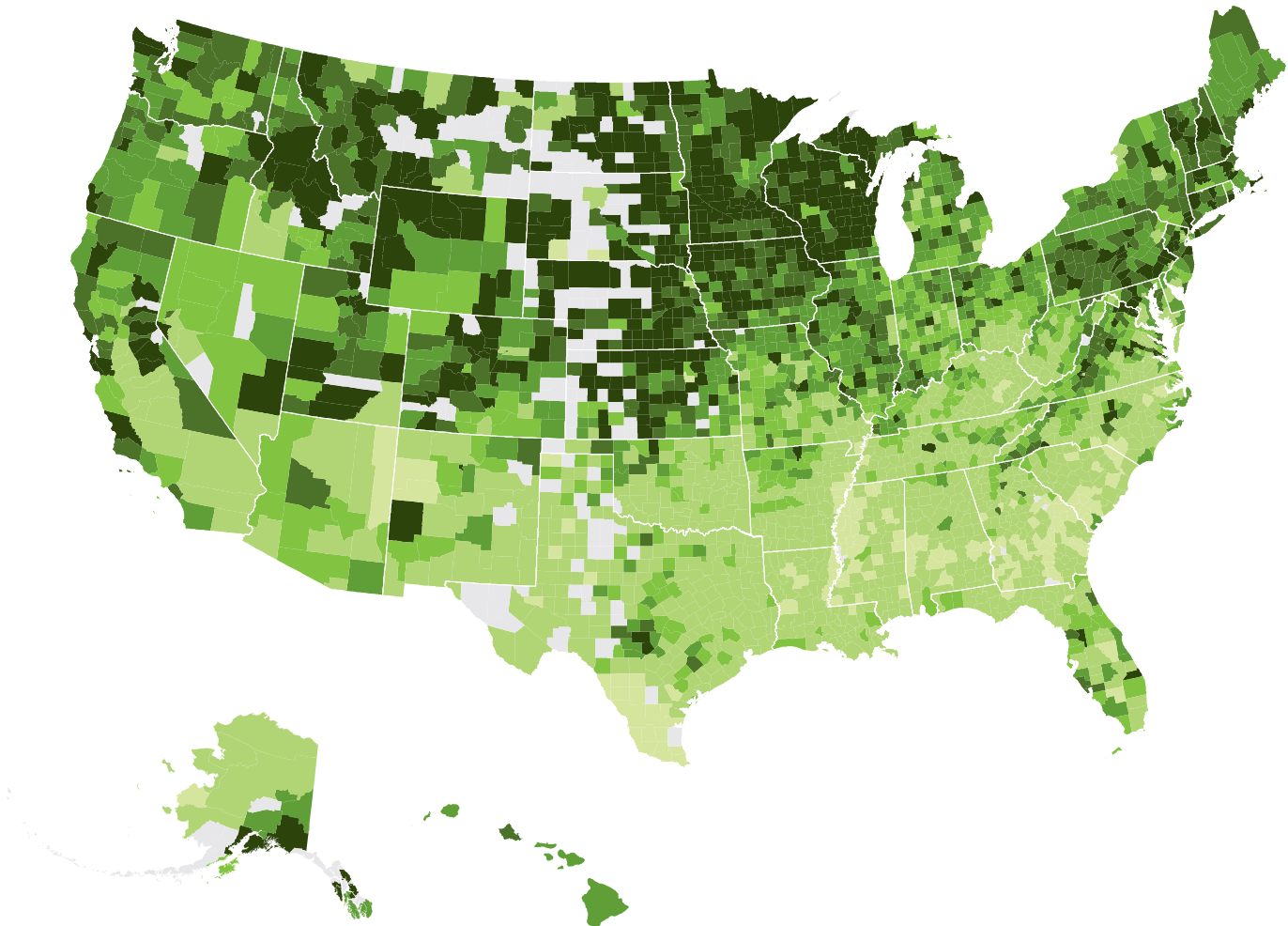
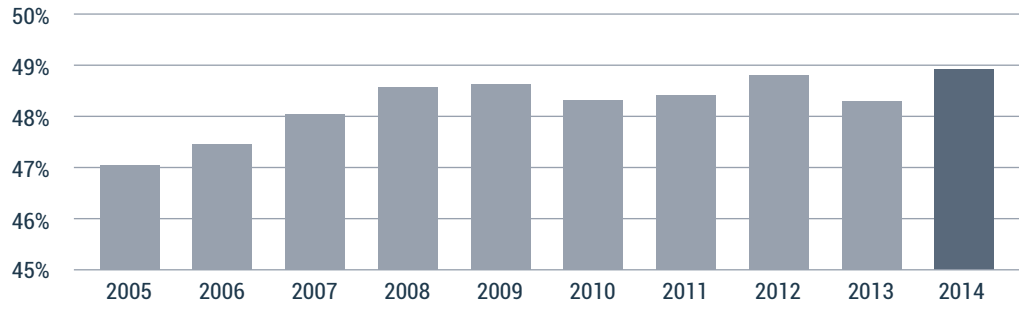
Another indicator of individuals' ability to access credit at all, or in a timely way and at favorable terms is their credit risk score. We use the Equifax Risk Score 3.0., which ranges in values from 280 to 850. Individuals with higher scores are viewed as better credit risks than those with lower scores. While classifications vary in the industry and in practice, we designate risk scores of 720 and higher as prime. In the PRIME CREDITS indicator map, we display the percent of the credit economy in that geography with prime credit risk scores.

The bar chart shows PRIME CREDITS values for the U.S., 2005–2014. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



U.S. Credit Economy, Prime Credits, 2005–2014



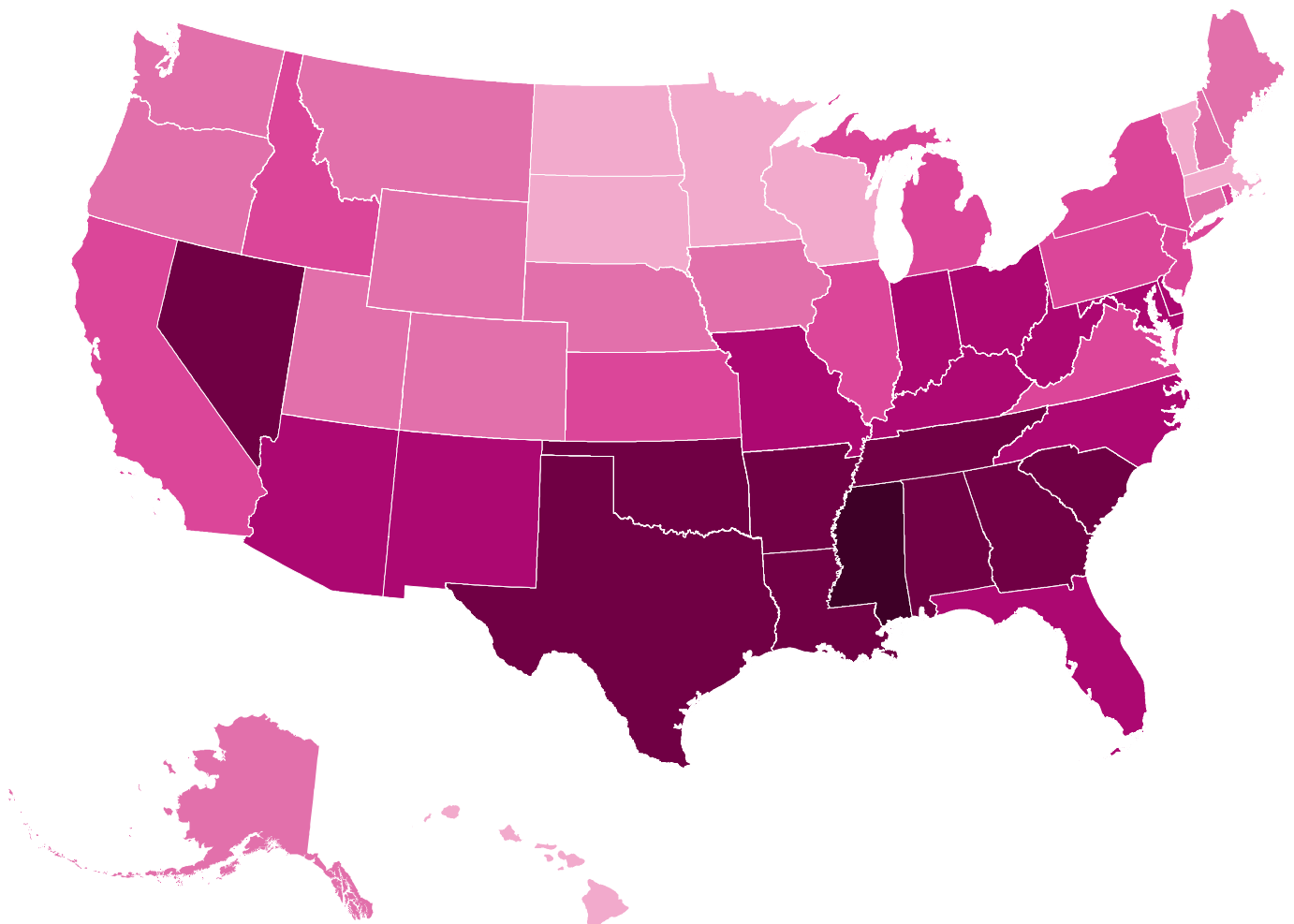
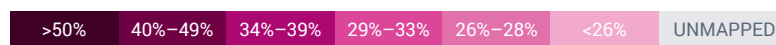
Data Source: FRBNY Consumer Credit Panel / Equifax

CREDIT QUALITY / SUBPRIME CREDITS

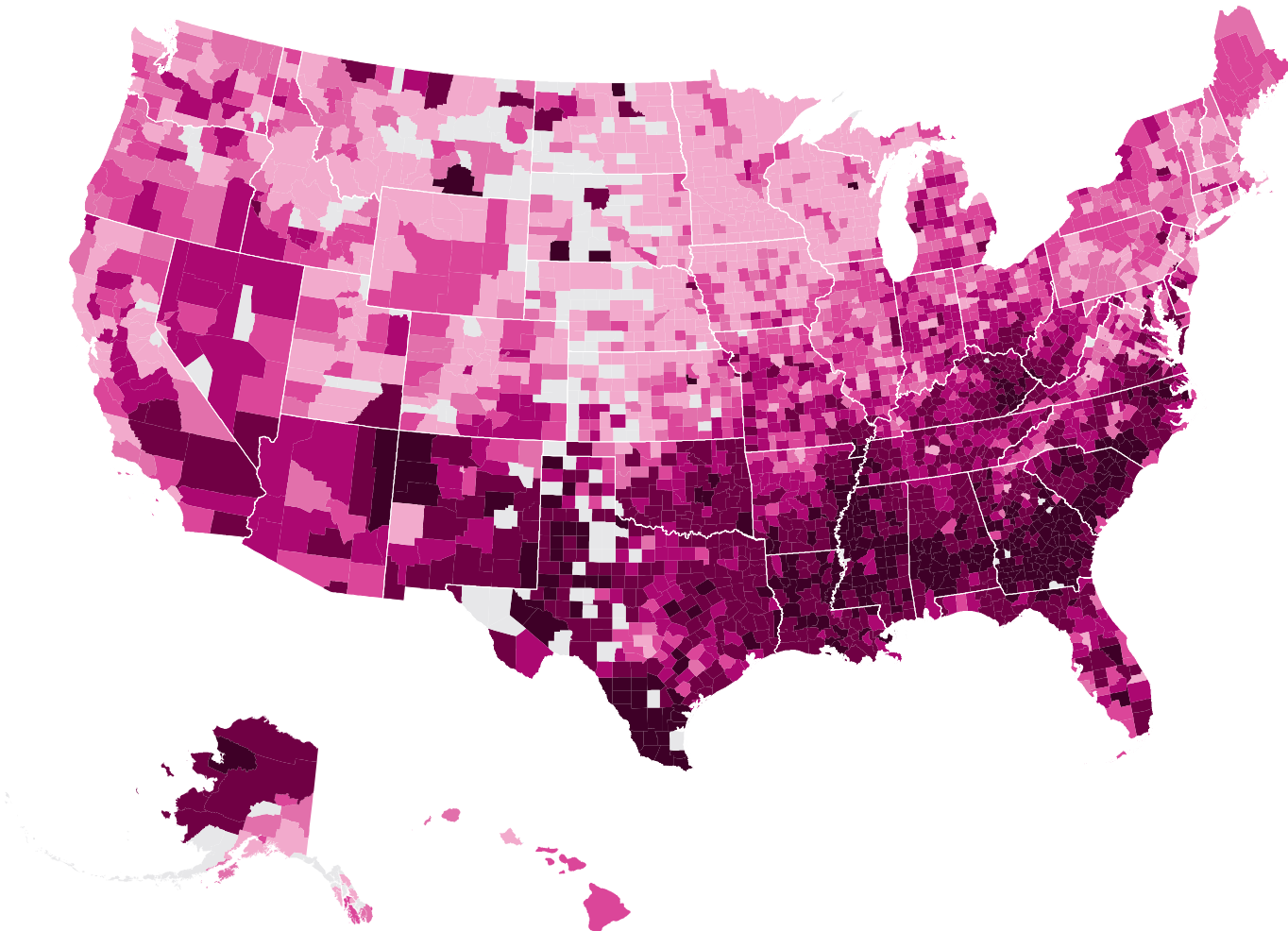
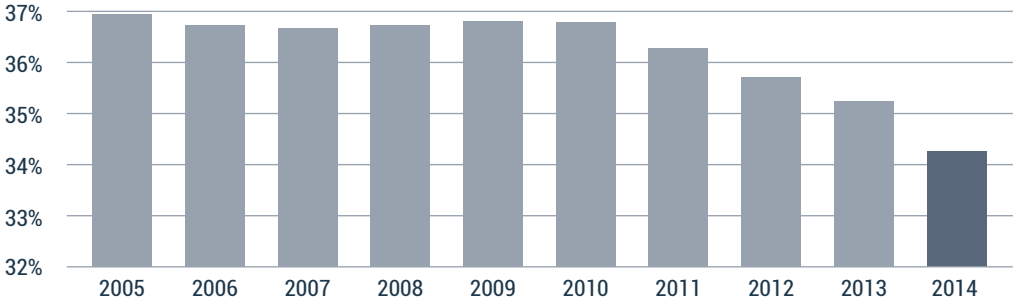
The SUBPRIME CREDITS indicator displays the percent of the credit economy in that geography that has a credit risk score of less than 660. As noted, we use the Equifax Risk Score 3.0., which ranges in values from 280 to 850. Individuals with higher scores are viewed as better credit risks than those with lower scores. Classifications vary in the industry and in practice.

The bar chart shows SUBPRIME CREDITS values for the U.S., 2005–2014. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



U.S. Credit Economy, Subprime Credits, 2005–2014



Data Source: FRBNY Consumer Credit Panel / Equifax

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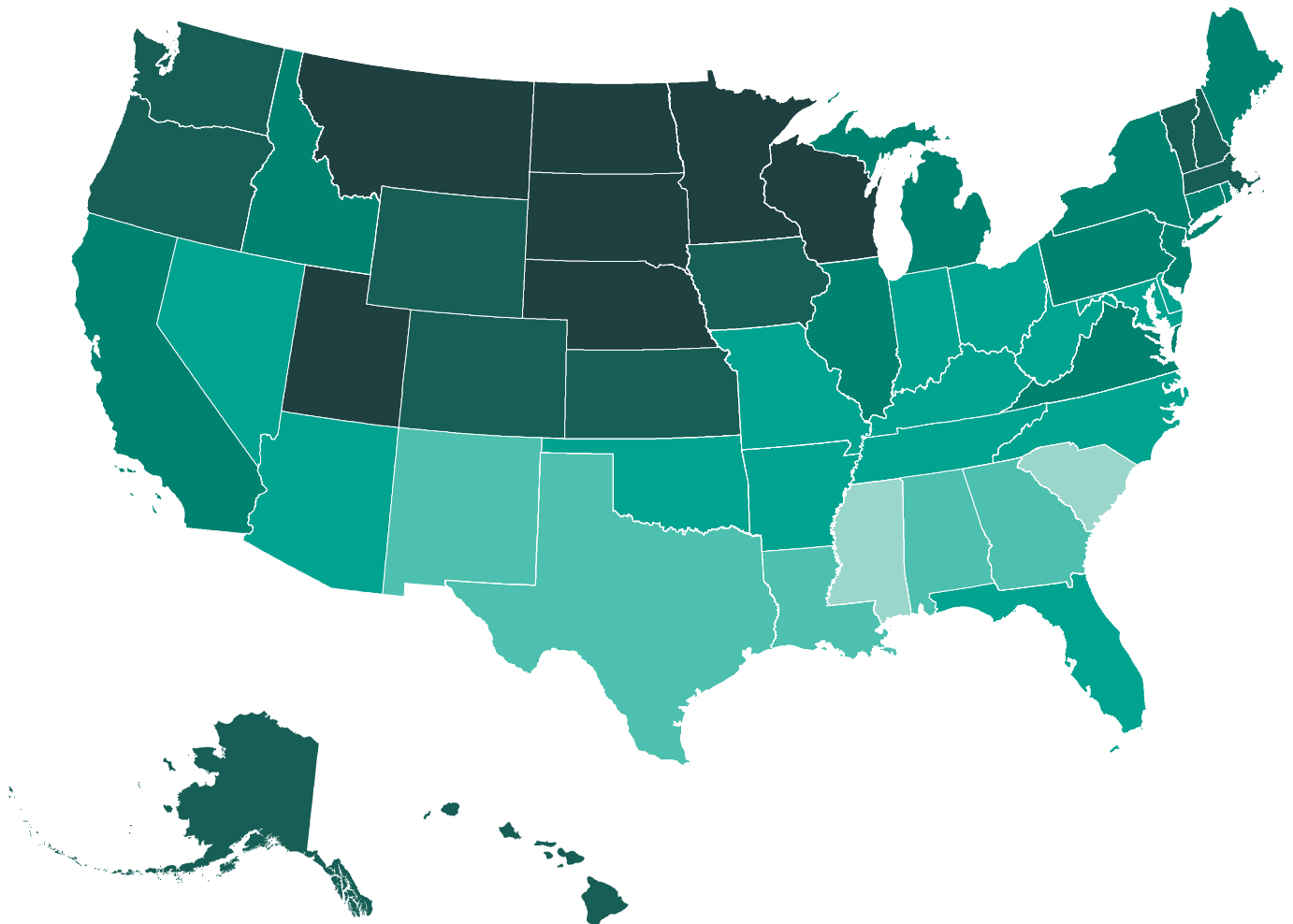
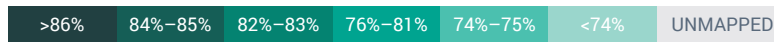
STRESS MAPS

GOOD PAYMENT HISTORY

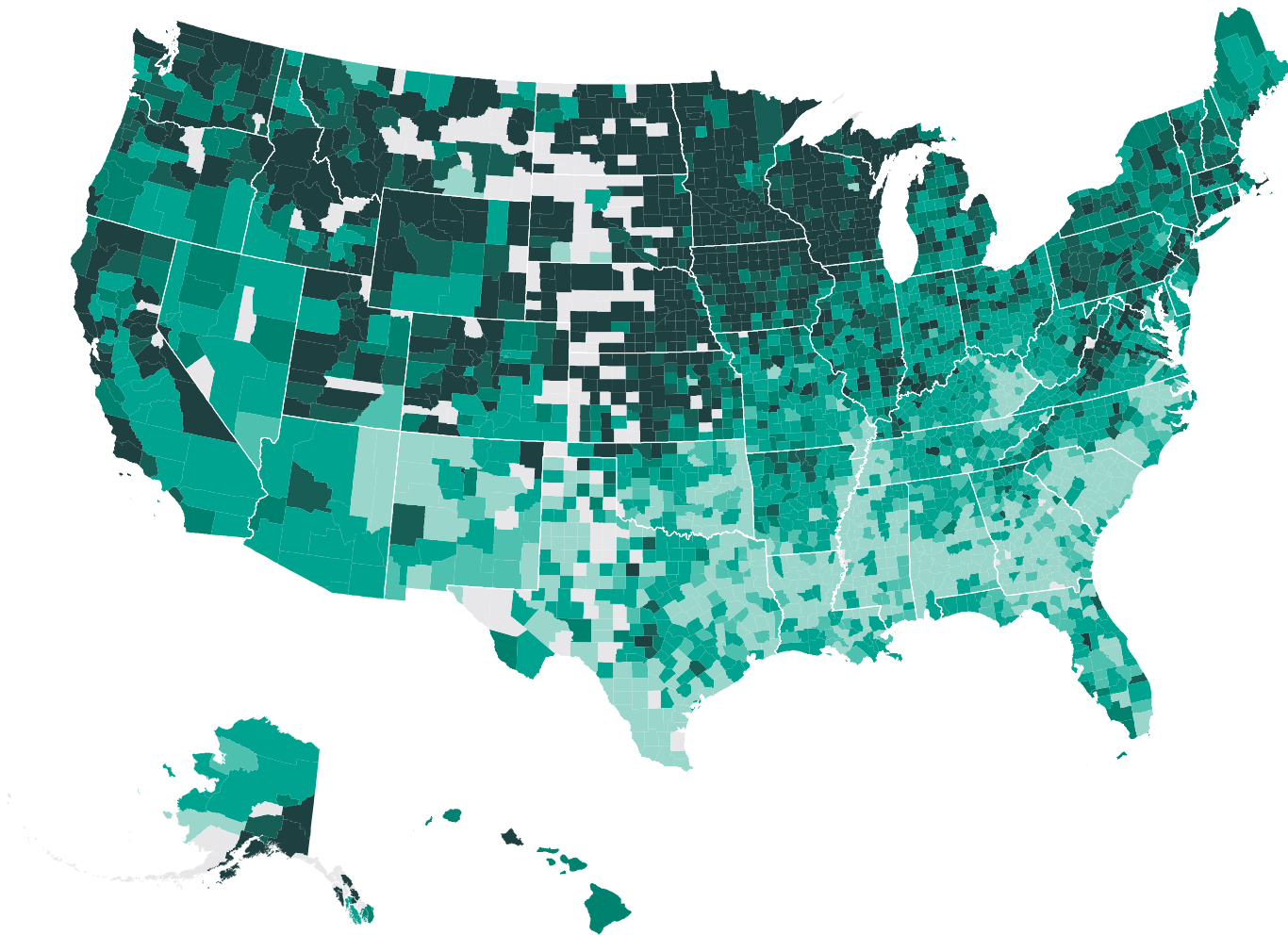
Credit distress may limit access to credit from traditional lenders and even deny residents economic opportunities. We use a five-category scale to characterize how well credit economy residents are managing their debt. We sort credit economy individuals by their quarterly payment history of their combined credit obligations from year-end 2013 to year-end 2014.

The GOOD PAYMENT HISTORY indicator is the percent of credit economy residents who were never more than sixty days past due during any of the quarters analyzed. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



Credit Stress based on Five Quarters of Payment History of Individuals



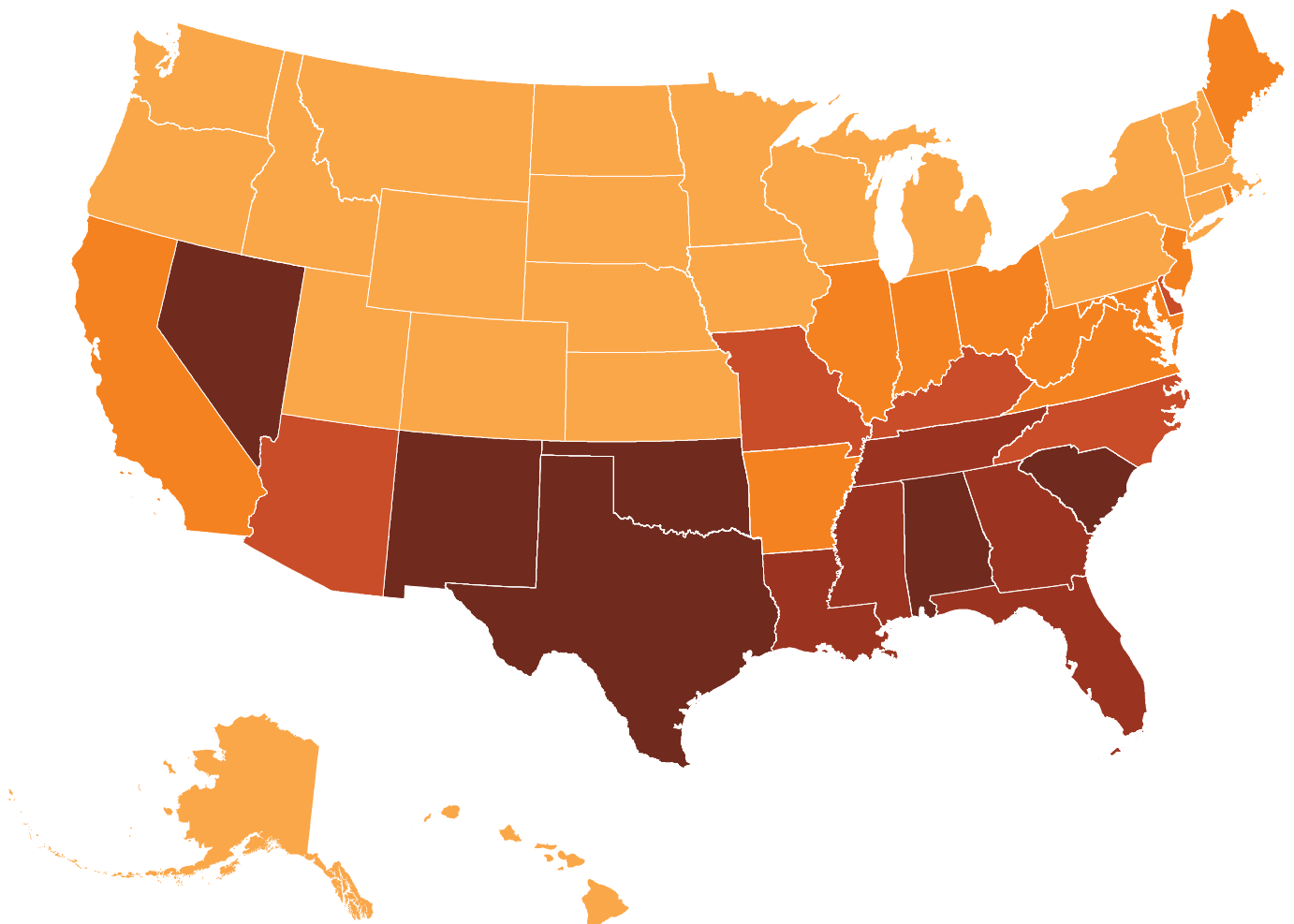
Data Source: FRBNY Consumer Credit Panel / Equifax

CONSISTENTLY DELINQUENT PAYMENT HISTORY

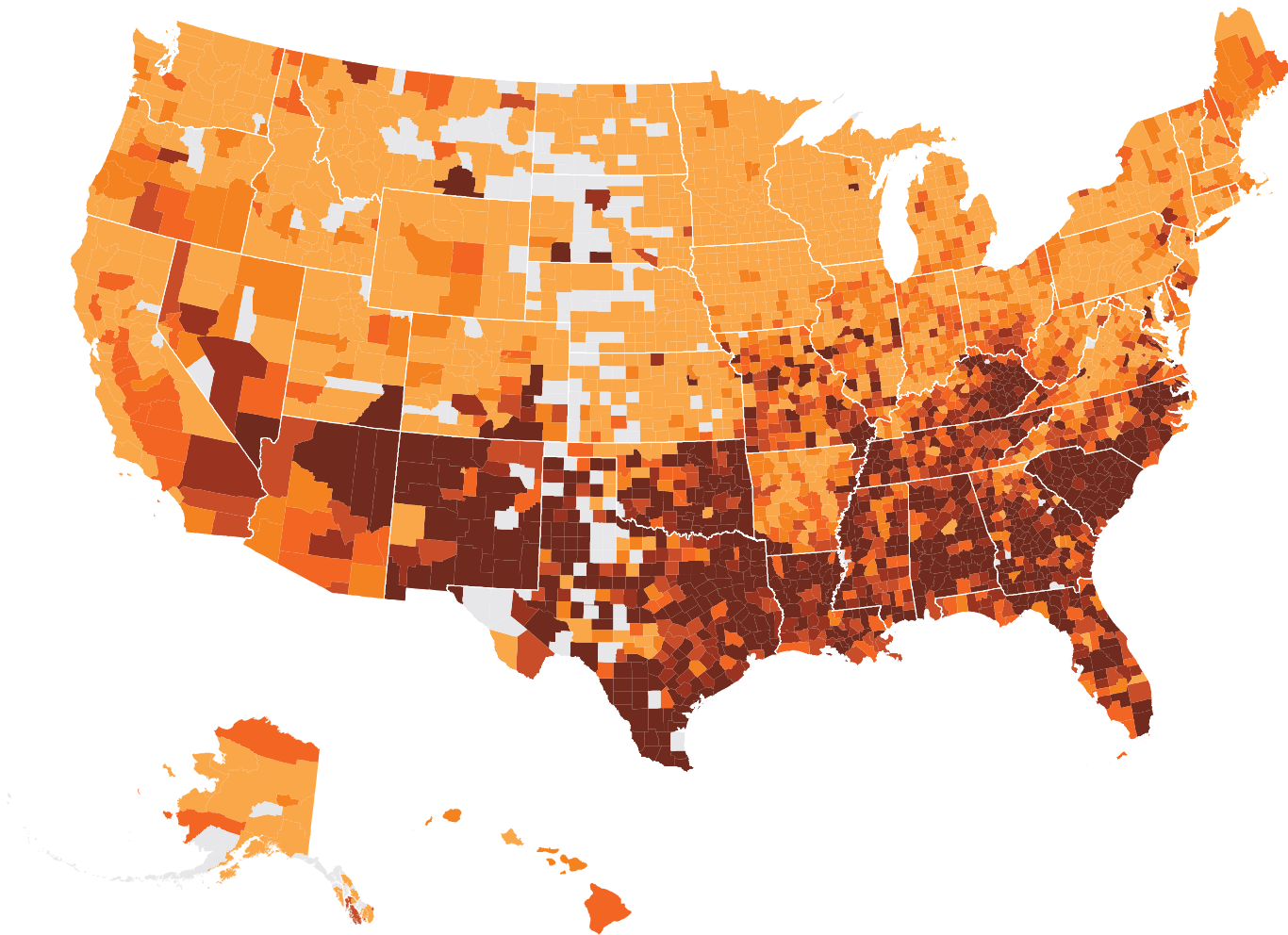
Credit distress among residents may limit access to credit from traditional lenders and even deny residents economic opportunities. We use a five-category scale to characterize how well credit economy residents have managed their debt. We sort credit economy individuals by their quarterly payment history of their combined credit obligations from year-end 2013 to year-end 2014.

The CONSISTENTLY DELINQUENT HISTORY indicator maps the percent of individuals in the credit economy who were sixty-plus days past due during all quarters of the period analyzed. The two maps show values at the state and county levels for 2014. The data class breaks in the legend bar apply to both maps.

U.S. 2014



Credit Stress based on Five Quarters of Payment History of Individuals



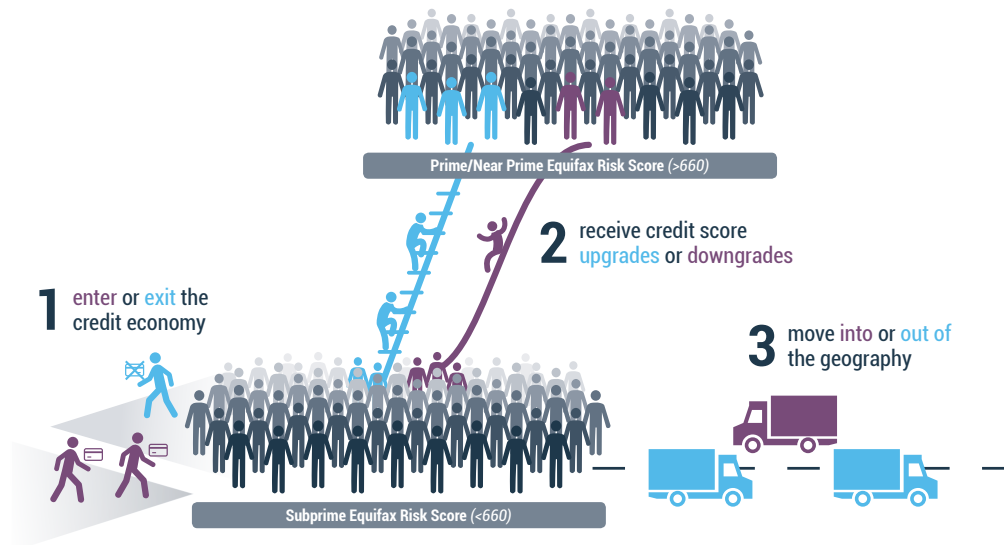
Data Source: FRBNY Consumer Credit Panel / Equifax

5

SUBPRIME MOBILITY EXAMPLE

On net, has the subprime segment of the community grown, declined, or remained almost unchanged? If so, why?

We disaggregate the net growth in the subprime segment of a community into three mutually exclusive components presented in the infographic below. Then, as an example of this concept, we present 2014 values for seven U. S. counties.



As the example of seven U.S. counties shows, the drivers can vary considerably from community to community when examined at the county level.

COUNTY	NET NEW SUBPRIME ENTRANTS New additions to the credit economy with a subprime Equifax Risk Score minus subprime individuals who are no longer included in the credit economy	NET STAYERS Individuals who stayed in the community and saw their Equifax Risk Score fall below 660 minus those who were upgraded to 660+	NET RE-LOCATORS Individuals with subprime Equifax Risk Score who relocated into the geography minus subprimes that moved away	SUBPRIME GROWTH OVER 4 QUARTERS How much did the subprime segment of the credit economy grow between 2013 Q4 and 2014 Q4?
Orleans, LA	3.70%	-0.56%	1.19%	GROWING 4.32%
Bexar, TX	2.99%	-3.63%	1.30%	0.66%
Kings, NY	5.22%	-4.95%	-0.92%	SHRINKING -0.65%
Cook, IL	3.96%	-4.12%	-0.88%	-1.03%
St. Louis, MO	3.18%	-3.78%	-0.68%	-1.28%
Miami-Dade, FL	4.00%	-5.37%	-1.17%	-2.54%
Los Angeles, CA	3.26%	-6.11%	-0.41%	-3.26%

Source: FRBNY Consumer Credit Panel / Equifax

A common pattern across all seven counties in this example is that new entrants and improvements in the credit risk scores of the stayers are the largest numerical influencers of subprime growth. Geographic relocations vary among counties and are relatively more important drivers of subprime growth for some areas, such as Bexar County, Texas, and Miami-Dade County, Florida.

Orleans Parish, Louisiana

- For example, the subprime population in Orleans Parish, Louisiana, grew 4.22 percentage points from 2013:Q4 to 2014:Q4. While this number may initially suggest that credit conditions deteriorated in the community, in fact most of this growth (3.7 percentage points) was due to more residents, on net, joining the credit economy. Over time, these new entrants may raise their Equifax Credit Risk Score to above subprime values and further contribute to community credit strength.
- Another source of subprime growth in Orleans Parish was an inflow of relocators. On net, more subprime residents moved into Orleans Parish than moved out of the county during 2014. Stayers played only a small role (-0.56 percent).

In summary, the main drivers for Orleans Parish's subprime growth were residents entering the credit economy and the relocators: $(3.70\% - 0.56\% + 1.19\% = 4.32\%)$.

Los Angeles County, California

- In contrast, Los Angeles County, California, saw a decline (-3.26 percent) in its subprime population over the same period. It, too, had a net inflow of new entrants (3.26 percent). However, this increase was largely offset by a net increase in the number of stayers who experienced a rise in scores above the subprime level (-6.11 percent).
- Unlike in Orleans Parish, the contribution of the relocators for Los Angeles County was relatively small (-0.41%).

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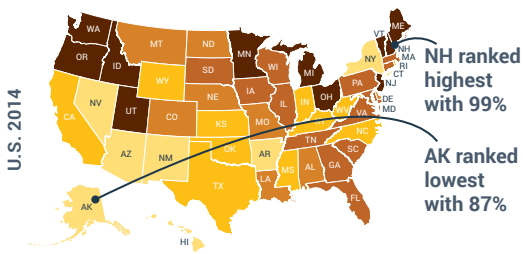
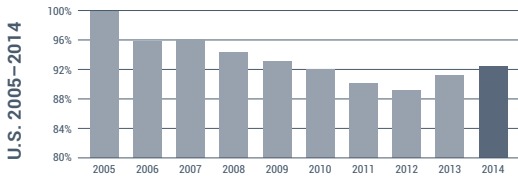
COMMUNITY CREDIT DATA USES

CREDIT INCLUSION

States ranked by credit behaviors

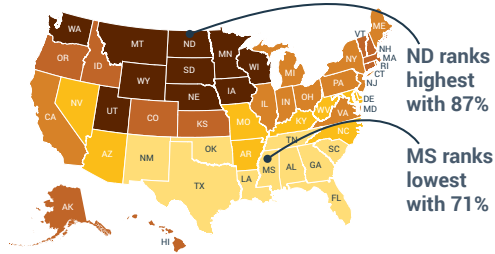
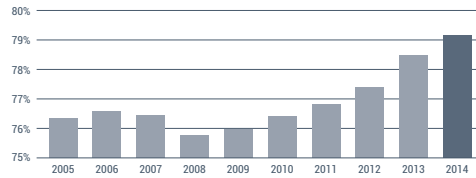
CREDIT ECONOMY

Percent of adult (18+ yrs.) population with a credit file and Equifax Risk Score



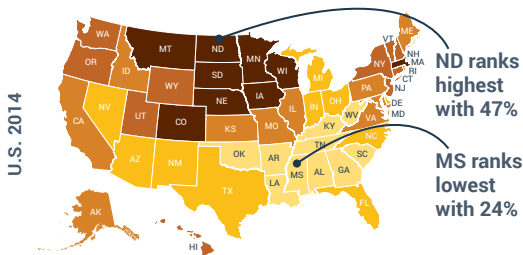
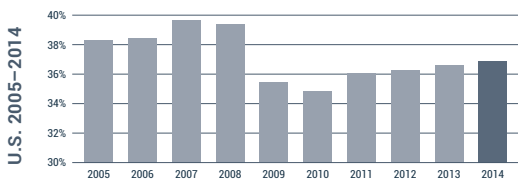
ON-TIME PAYERS

Percent of credit economy current on all credit obligations for the past 4 quarters



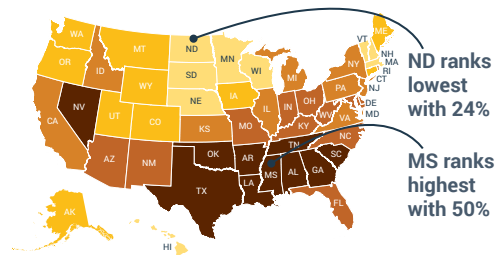
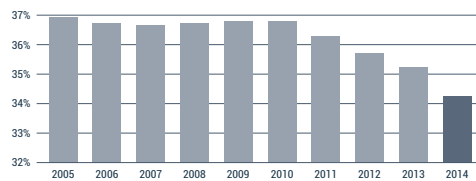
UTILIZATION

Percent of credit economy with unused utilization of 70 percent or more



SUBPRIME

Percent of credit economy that is subprime (Equifax Risk Score <660)

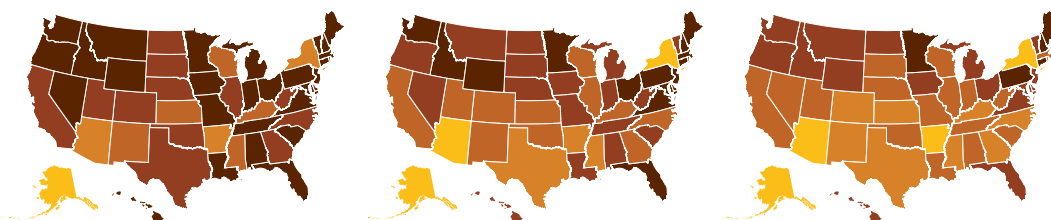


Data Source: FRBNY Consumer Credit Panel / Equifax

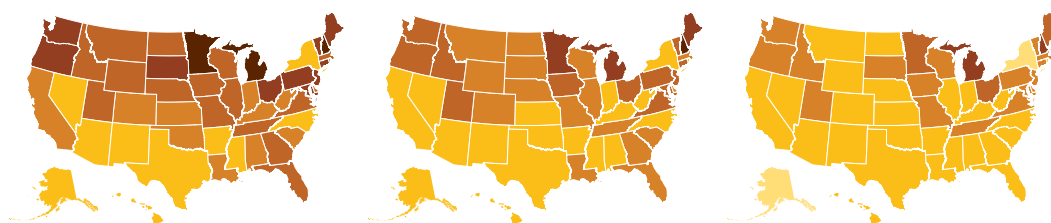
NOT IN CREDIT ECONOMY

2007–2014

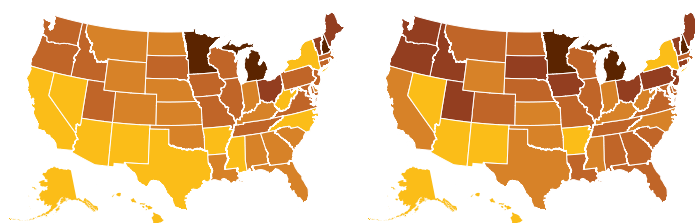
Year	2007	2008	2009
U.S.	4.0%	5.7%	6.9%



Year	2010	2011	2012
U.S.	8.0%	9.8%	10.9%



Year	2013	2014
U.S.	8.8%	7.5%



Percent of adult (18+ yrs.) population not in FRBNY Consumer Credit Panel / Equifax data source



CREDIT STRESS

How well are individuals managing their credit obligations? Credit distress may limit access to credit from traditional lenders and even deny residents economic opportunities. The Credit Stress metrics use a five-category scale to characterize a community. see About the Data for details.

The bar chart below shows the values for the U. S. In 2014, 81% of the U. S. credit economy was current or less than 60 days overdue on all their credit obligations during each quarter from year-end 2013 to year-end 2014.

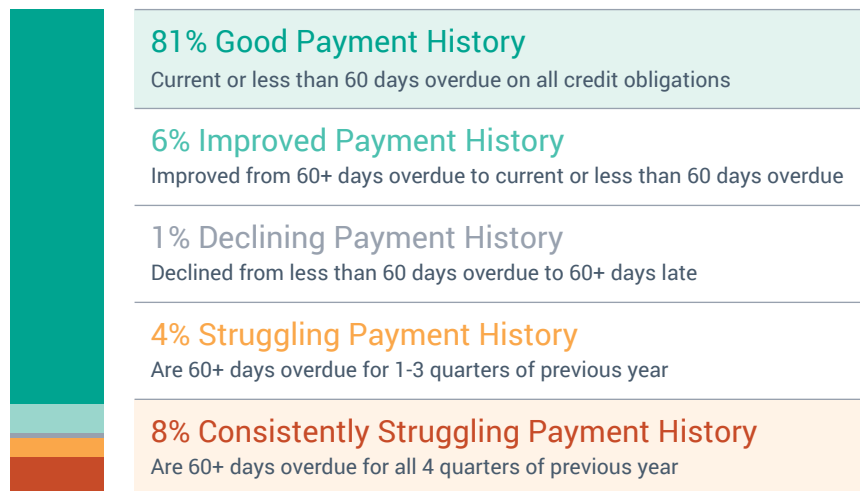
In contrast, 8 percent of the U. S. credit economy was 60 or more days overdue during each quarter from year-end 2013 to year-end 2014.

For each geography, the credit stress values sum to 100 percent for each time period.

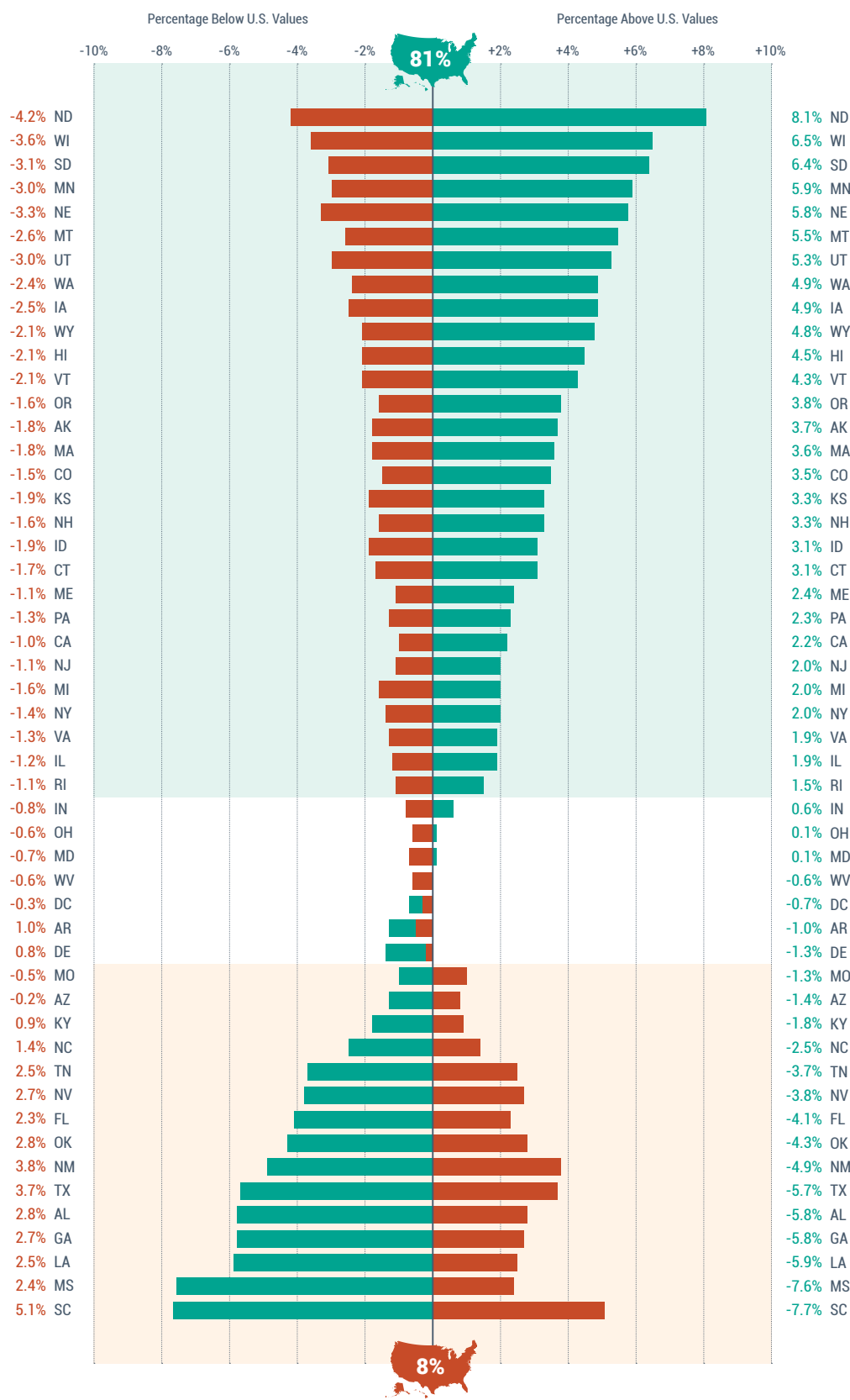
The bar chart to the right uses credit stress data to rank states by their GOOD PAYMENT HISTORY and CONSISTENTLY STRUGGLING PAYMENT HISTORY values for 2014.

Both series are charted as percentage points above or below the U. S. values of 81 percent for good payment history and 8 percent for consistently struggling payment history.

U.S. 2014



States Ranked by Credit Stress, 2014



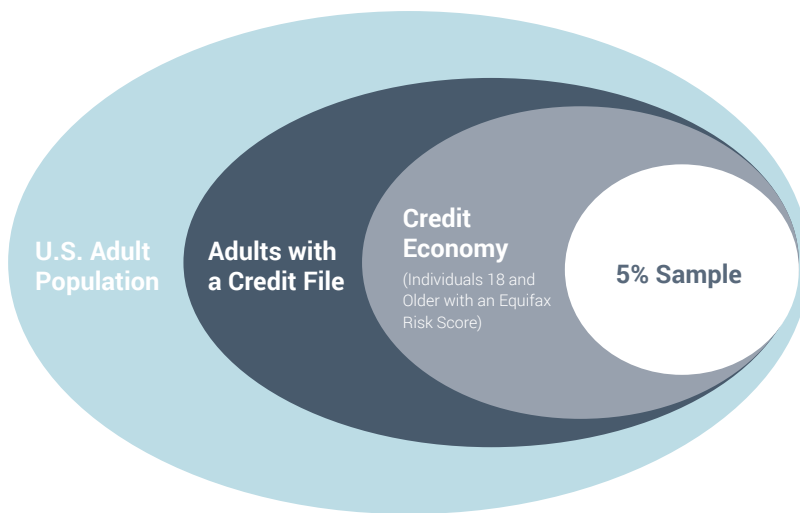
7

ABOUT THE DATA AND DEFINITIONS

Data Sources

The Community Credit metrics have two data sources. For the credit values, we rely on the FRBNY Consumer Credit Panel / Equifax (CCP), which consists of detailed Equifax credit report data for a unique longitudinal quarterly panel of individuals and households. The panel is a 5 percent nationally representative sample of all individuals with a social security number and a credit report. All information is anonymized.

The data are quarter-end values, available at the end of each quarter. For more information, see the Federal Reserve Bank of New York Staff Report, "An Introduction to the FRBNY Consumer Credit Panel."²¹



For the U.S. population values needed for two inclusion measures, we use the U.S. Census Bureau's American Community Survey (ACS) 1-year estimates (2006 through 2013 releases). However, the ACS values were not available for 2014. Hence, for the web-based interactive, we used the ACS 2013 values as a proxy. Later in the year and after consultation with the Census outreach team, we were advised to use the Population Estimates Program (PEP), Annual Estimate of the Resident Population, July 2014 estimates. In other words, the maps in this chart book may differ from the website data interactive maps for 2014, but are likely to be better estimates of the indicators.

The maps exclude geographies with fewer than 100 observations in the CCP data. As a result, we do not display values for 170 counties out of the 3,141 counties in the U.S. For the website data interactive, the cut-off threshold was 1000 observations.

For 2014, our sample size was 112.15 million individuals.

²¹ See Donghoon Lee and Wilbert van der Klaauw, "An Introduction to the FRBNY Consumer Credit Panel," Federal Reserve Bank of New York Staff Report no. 479, November 2010.

Data Notes

Credit Economy: The credit economy for any geography is estimated as 20 times the number of people with a credit score in the CCP for that geography.

Adult Population: Adults are defined as age 18 and above.

Revolving Credit Products: An individual in the credit economy is counted as holding a revolving credit product if he or she has a bankcard account that has a credit limit greater than \$0 and/or a revolving HELOC account that has a credit limit greater than \$0. We do not include store-specific credit cards because their use is limited to specific products and services offered by particular stores.

Utilization Rate: The utilization rate for an individual is computed as the sum of all revolving account balances divided by the sum of credit limits for all revolving accounts.

Credit Score Status: Credit score is the Equifax Risk Score 3.0. It was developed by Equifax and its values range from 280 to 850. Individuals with higher scores are viewed as better credit risks than those with lower scores. We use score classifications of less than 660 as subprime, scores between 660 and 719 as near prime, and scores 720 and higher as prime. However, classifications vary in the industry and in practice.

Inclusion Indicators

Credit Economy Included: CCP-based estimate of the number of individuals in the population with a credit score as of year-end (multiplied by 20) divided by the Census estimate of the population 18 or older for that year. Due to differences between CCP and Census data, this measure is top coded at 100 percent.

Credit Economy Not Included: 100 percent minus the credit-economy-included rate. Due to differences between CCP and Census data, this measure is bottom coded at zero.

Revolving Credit: Number of individuals with a revolving credit product divided by the number of individuals in the credit economy.

Utilization Limits: Number of individuals with a revolving credit product and a utilization rate of 30 percent or less, divided by the number of individuals in the credit economy.

On-Time Payers: Number of individuals in the credit economy who were current on all debt during the four quarters of 2014, divided by the number of individuals in the credit economy.

Prime Credits: Number of individuals in the credit economy with an Equifax Risk Score of 720 or higher, divided by the number of individuals in the credit economy.

Subprime Credits: Number of individuals in the credit economy with an Equifax Risk Score below 660, divided by the number of individuals in the credit economy.

Stress Indicators

Credit Stress: For each individual in the credit economy, credit stress status is determined based on year-end data. We first determine whether the person was 60+ days past due on any account as of year-end 2014. Then, using their payment history on all accounts for each of the preceding four quarters (2013:Q4, 2014:Q1, 2014:Q2, and 2014:Q3) we categorize individuals based on the following three filters:

- Is the person 60+ days past due on any account as of year-end 2014 (i.e., at the end of 2014:Q4)?
- Was the person 60+ days past due during any of the preceding four quarters?
- Was the person 60+ days past due during all preceding four quarters?

Using these filters, we classify each individual in the credit economy at year-end 2014 into one of the following five mutually exclusive credit stress categories:

Good History: Person was never 60+ days past due during any of the quarters analyzed.

Improved History: Person was not 60+ days past due as of year-end 2014, but was 60+ days past due at some point during the preceding four quarters.

Declining/Newly Delinquent History: Person was 60+ days past due as of year-end 2014, but was not 60+ days past due during any of the four preceding quarters.

Struggling History: Person was 60+ days past due as of year-end 2014 and was 60+ days past due during some, but not all, of the preceding four quarters.

Consistently Delinquent History: Person was 60+ days past due during all of the quarters analyzed.

The following diagram illustrates the categorization process:

	Was the person 60+ days past due on any credit obligation during any of the preceding four quarters?		
	Was the person 60+ days past due on any credit obligation during each of the preceding four quarters?		
Payment Status as of Year-end 2014	Current	30-59 Days Late	60+ Days Late
Current	On-time Payers	Good History	Improved History
30-59 Days Late			
60+ Days Late	Declining History		Struggling History Consistently Delinquent History

This classification is summarized into the following credit stress taxonomy:

Credit Stress based on Five Quarters of Payment History of Individuals				
Good History Current or only 30-59 days late	Improved History Improved from 60+ days late to current or no more than 59 days late	Declining History Deteriorated from current or only 30-59 days late to 60+ days late	Struggling History Was 60+ days late for some, but not all, of the period	Consistently Delinquent History Was 60+ days late for entire period

Components of Subprime Mobility

Net new subprime entrants (the new entrants): The portion of subprime growth rate attributable to new additions to the community who have a subprime credit score, minus the subprime individuals who are no longer included in the credit bureau files.

Net risk-score changers (the stayers): The portion of subprime growth rate attributable to people who stayed in the community and saw their credit scores decline below 660, minus those whose scores improved to 660 or higher.

Net geographic movers (the relocators): The portion of subprime growth rate attributable to subprime residents relocating into the community, minus the subprime residents who moved away.

Notes on Class Break Ranges for the Maps

For the sake of visual clarity, the class break ranges on the maps are displayed as whole integers. However, the underlying data are sorted and mapped using up to two decimal places (rounded up from six decimal places). So how do they correspond?

We used the following convention, which is best explained with an example. Assume the following class break ranges from the not-included maps:

Shading on the Maps							
Map Legend	>15%	11%–14%	9%–10%	7%–8%	4%–6%	<4%	Unmapped
Corresponding Data Values for the Geography	> = 15.00%	11.00–14.99	9.00–10.99	7.00–8.99	4.00–6.99	<4.00%	

For example, a county with a value of 3.88 will be in the class labeled <4 percent. A county with a value of 4.22 percent will be in the class labeled 4 to 6 percent. A county with a value of 6.99 percent will also be in the class labeled 4 to 6 percent. However, a county with a value of 7.01 percent will be in the class labeled 7 to 8 percent.

“As more and more local leaders come to see individual and family financial stability as critical to programmatic investments in communities at risk, data are central to both taking stock and planning for the future. To that end, the Federal Reserve Bank of New York’s new interactive Community Credit database is a revelation...and a gift.”

Jonathan Mintz, President and CEO, Cities for Financial Empowerment Fund, Inc.

“In a time when our communities’ resiliency is becoming more and more important, this new way of thinking about the local credit economy can have profound impact on how we design, implement and evaluate anti-poverty interventions. The comprehensive analysis of credit behavior, as it relates to access, utilization and quality can enable policy makers and practitioners to focus on investments that put underserved communities on the path to financial wellbeing.”

Nancy Yuill, Executive Director, Innovative Changes

“In order to channel consumer credit resources where they will have the greatest impact, it is important to identify “where” the credit stressed communities are located. Helping individuals to start building a credit history or improve their existing one starts by identifying those who have credit challenges. This is where Community Credit plays an invaluable role.”

Dara Duguay, Executive Director, Credit Builders Alliance

“Access to credit is a primary driver of economic mobility, yet for millions of Americans basic products like a checking account or a credit card remain out of reach. The Community Credit Mapping Tool provides local communities, community development financial institutions, and policy makers greater insight into where the greatest needs and changes are happening, and where to target resources more effectively.”

Jessica A. Milano, Deputy Assistant Secretary, Small Business, Community Development, & Housing Policy, U. S. Department of the Treasury

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