Financial Insecurity in Wisconsin:
Using data science tools to identify areas of need

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[T]he effects of job loss are wide-reaching and can be found beyond the economic sector. Labor market instability begets housing and neighborhood instability. Beyond this empirical contribution, this finding speaks to a broader implication for research on inequality: namely, the need to understand poverty, not simply as the result of low incomes, but as hardship too often experienced as correlated adversity, the linked ecology of maladies across multiple dimensions and institutions [...].
Desmond & Gershenson (2016), p. 12

Overview

American Family has been involved with charitable efforts in our home state of Wisconsin throughout its history, and continues to engage with local community organizations to amplify their impact. In 2017, American Family's Data Science and Analytics Lab was asked to expand on these efforts by finding a way to quantify the challenges related to poverty and financial insecurity that many Wisconsin residents are facing.

A range of existing data sources and previous studies are relevant to these issues (see Related Work), but fail to fully answer key questions for local organizations. In some cases, those questions – about housing, transportation or familial support, for example – may not have been central to the study (e.g., pre-existing surveys). Other sources fall short due to insufficiently granular information or a lack of local focus (e.g., US Census data). To provide a more targeted source of information for understanding the struggles of Wisconsin families, a custom survey was developed including key areas identified by local stakeholders. Item-response theory was used to develop a scale of financial insecurity that could be used to segment respondents and interpret the results, and machine learning was used to extrapolate these results statewide.

The contributions of this project are twofold. First, the survey and analytical results reported here serve as a knowledge base that policy organizations can draw on to augment other information sources. Second, this report describes the use of novel methodology that may be useful for future survey work in this area. Item-response theory, a tool from psychometrics, is used to develop a scale of financial insecurity that encompasses many individual observations about each respondent. And a supervised machine learning model is used to generalize the scale at an individual level across the state.

The work on the project proceeded in five stages:
1. Development of a survey instrument, informed by prior work on financial insecurity
2. Administration of the survey to a representative sample of Wisconsin residents
3. Development of a financial insecurity scale to be used in reporting results
4. Application of this scale to the entire state population, in order to support fine-grained judgements of need while preserving residents' privacy
5. Development of visualization tools to allow interactive exploration of the results obtained by survey research and modeling

The technical details of stages 1-4 are described below in the Methodology section, while the interfaces for interactive exploration are referenced in the appendix. The remainder of this report presents some of the main findings of the survey work.

Two significant caveats should be highlighted in connection with the report's findings. First, it is likely that the electronic delivery mode of this survey introduces a sampling bias against disconnected and vulnerable populations. For this reason, findings related to the prevalence and severity of extreme financial insecurity should be assumed to be underestimated by this study, to a degree that is difficult to quantify. Second, while the survey instrument described here addresses a wide range of topics (including income, financial management, demographic variables, mental health, transportation and housing options, and support networks), it does not support conclusions about potential causal links between any of these.

The strongest statements that can be made on the basis of these data are about statistical associations, but findings of causal impact would need to rely on other evidence. While these limitations must be acknowledged, there is value in the analysis presented here as a depiction of the challenges faced by financially insecure Wisconsin residents and the distribution of insecurity across the state.

Related Work

Prior statistical approaches to assessing financial insecurity in Wisconsin and other areas of the US have relied primarily either on Census data or on survey instruments specific to the goals of the study.

The official federal poverty measure is based on the US Census Bureau's Current Population Survey Annual Social and Economic Supplement. Because the official measure does not take into account rising standards of living, or important factors such as childcare expenses, work-related expenses, variability of medical costs (and the geographical variability of these factors), the Census Bureau also publishes the Supplemental Poverty Measure (SPM). The SPM threshold is adjusted based on these factors (among others), to better reflect the economic reality faced by a given family. See Proctor et al. (2016) for discussion of the federally-reported poverty measures.

In addition to the federal measures, a number of alternative poverty measures use Census data, including measures focused on particular states or regions of the US. One such measure is the Wisconsin Poverty Measure (WPM; cf. Smeeding & Thornton, 2018), which adjusts thresholds based on state-specific policies and programs that affect incomes or expenses for Wisconsin families. The ALICE poverty measures (United Way, 2017) are a similar attempt to adjust for factors that affect the need experienced by individual families, in this case centered around a particular type of poverty in America (Asset Limited, Income Constrained, Employed). One drawback of these Census-derived measures is that they aggregated to a relatively high level: counties or Census Public Use Microdata Areas (PUMAs) of over 100,000 residents. Another is that they are largely unidimensional, reflecting financial need, but not directly intersecting this with correlated sources of adversity in the sense of Desmond & Gershenson (2016).

Statistical investigations of financial insecurity that have used survey methodology (many of which were consulted in the development of our own instrument; see below) have the potential to overcome these difficulties of census-derived measures. By focusing on particular geographic areas, they may provide a more fine-grained picture of the actual conditions experienced by groups of families characterized geographically or demographically. And supplemental questions can be added to probe related constructs such as housing security, interaction with the criminal justice system, education, etc. These advantages come coupled, however, with the drawbacks of survey research (subjectivity and lack of reliability in responses, modality effects, sampling challenges).

In any case, none of the prior survey research on poverty and financial insecurity directly addressed the breadth of topics in this project's charter, and focused specifically on Wisconsin. For instance, while the Wisconsin Families Study focused specifically on Wisconsin, it had a comparatively small sample size and addressed specific issues around economic support programs and child well-being. National surveys such as the CFSI Financial Pulse and the Pew survey of Americans' Financial Security include relatively few questions compared to the 72 items in this instrument. And while the Survey of Economic Expectations covers a wide range of topics (from family composition to housing status to mental health) and has a robust sample of respondents, it does not focus on Wisconsin, and omits some topics from this study (such as transportation options and familial support infrastructure).

Methodology

In order to ensure that our analysis was sound and appropriate to the concerns of local stakeholders, the research team relied heavily on content experts in developing the instruments and methods for this project. As described below, the survey instrument draws on question structures from prior surveys on poverty, and was reviewed by nonprofit organizations active in Wisconsin. We also employed survey research experts from Civis Analytics to review and manage the survey administration.

Survey Development

The survey instrument developed for this project was informed by many prior questionnaires related to poverty and financial insecurity in the United States. A list of the main surveys reviewed in constructing our instrument is listed in Appendix 1.

The final survey instrument is provided in Appendix 2, and the breakdown of question types is shown in Table 1. (Note that multiple-select items are counted as multiple items in this summary.)

Table 1: Question types included in survey

Question category	Number of questions
Demographic	11
CFSI financial health indicators	6
Other financial status indicators	2
Employment status	3
Housing status	3
Transportation options	1
Financial services used	6
Loan products used	5
Shocks and challenges (primarily financial)	22
Mental health issues	5
Familial / social circle support	5
Insurance status	2
Child care options	1

Survey Administration

The survey was fielded by Civis Analytics over the course of two weeks in September of 2017, using the Qualtrics electronic administration platform. The platform allowed responses to be collected using both web-based and mobile clients using the same logic for question flow. The target volume for the survey was 5,000 respondents in the state of Wisconsin, which is close to the maximum number possible given the population of Qualtrics panel participants. More fine-grained demographic specifications could not be imposed on the sample of participants without limiting overall volume, but differences from the general state population were addressed through survey weighting.

The final survey result consisted of 4,091 complete and validated responses. A weight was associated with each response based on demographic characteristics such as age, ethnicity and gender, so that the final weighted sample characteristics were approximately proportional to those of Wisconsin's population.

Scaling

One of the goals of this project was to characterize the challenges faced by financially insecure Wisconsin residents, and a prerequisite for that type of investigation is a single measure of financial insecurity that can be used to segment the population for comparisons. The survey instrument included in Appendix 2 included many financial indicators, such as income, home ownership, and income volatility, but these need to be collapsed into a single scale.

Previous studies have used scales based on domain-specific logic to aggregate across survey items. For example, the Financial Health Score of the CFSI (Center for Financial Services Innovation, 2017) is based on a weighted aggregate of multiple survey indicators, where weighting is driven by qualitative considerations of the relative importance of different factors. Instead of an approach rooted in domain knowledge, the scale for this study is based on *item response theory (IRT)*. IRT is a family of latent variable models commonly used in psychometrics (the applied psychological science underlying many achievement tests). IRT brings technical challenges in that a robust sample of responses is necessary for good parameterization of the model, and items may need to be excluded from the scale in case of lack of fit. However, they have the great advantage that they allow the relative importance of different factors to be determined directly from data, and are therefore less reliant on subjective human judgement. IRT was recently used to develop the Financial Well-Being Scale for the CFPB (Consumer Financial Protection Bureau, 2017).

IRT models are generative models in which the probability of each survey or test response *i* is modeled conditionally on the latent trait score θ_j of the relevant individual *j*, and the probability of each response is conditionally independent on the others given the latent trait θ_j:

$$P(X_j) = \prod_i P(X_{ij}|\theta_j)$$

An overview of IRT models is provided by Edwards (2009).

Many IRT model types are limited to *dichotomous* item types, where can only take on binary values (e.g., *correct* or *incorrect*). Because the survey items we selected for our financial insecurity scale were ordered categories (such as *very confident/moderately confident/slightly confident/not at all confident*), we instead used the more general *graded response model* (cf. Samejima, 1997) in which cumulative probabilities of responses falling in category k or above are modeled as:

$$P(X_{ij} \geq k|\theta_j) = \frac{e^{\alpha_i(\theta_j - \beta_{ik})}}{1 + e^{\alpha_i(\theta_j - \beta_{ik})}}$$

Fitting the model involves setting the model parameters (the trait scores θ, the discrimination parameters α and the difficulty parameters β) to their maximum likelihood estimates, and doing inference for a new individual's survey responses consists in finding the MLE for θ_j given the other parameters and X_j.

To create our financial insecurity scale, we selected 21 items based on survey questions that we considered to be aligned with the concept. Some of these items are simply questions from the survey instrument, while others are aggregations of multiple questions (e.g., the number of loan products used). The set of 21 items covered the areas of income, debt, unemployment, home ownership, banking access, and practical financial challenges, and are listed in the table below. As indicated in the table, 4 of these items were dropped due to lack of model fit, leaving a total of 17 items that were used in the final scale.

Table 1: Items used for IRT scale of financial insecurity

Item	Number of response levels	Removed from final scale?	Based on question(s)	Reverse coded?
Income	6	No	Q14	Yes
Income volatility	4	No	Q18	No
Involuntary employment indicator	2	No	Q15	No
Home ownership	2	No	Q7	Yes
Number of high-cost loan products used	3	No	Q26	No
Number of banking services used	5	Yes	Q25	Yes
CFSI Financial Indicator 1: Income vs. spending	5	Yes	Q19	No
CFSI Financial Indicator 2: Bill payment	4	No	Q20	No
CFSI Financial Indicator 3: Financial cushion	5	No	Q21	No
CFSI Financial Indicator 4: Saving for future goals	4	No	Q22	No
CFSI Financial Indicator 5: Debt load	4	No	Q23	No
CFSI Financial Indicator 7: Insurance coverage	5	No	Q24	No
Recent overdue bill	2	Yes	Q29	Yes
Lack of health insurance	2	No	Q29	Yes
Food insecurity	2	No	Q29	Yes
Do without health care due to cost (self)	2	No	Q29	Yes
Do without medicine due to cost (child)	2	No	Q29	Yes
Early withdrawal of retirement funds	2	No	Q29	Yes
Unmanageable debt	2	Yes	Q29	Yes
Bankruptcy	2	No	Q29	Yes

For ease of interpretation, the raw financial insecurity scale values (θ parameter estimates from the model) were transformed into percentiles of the response population as a whole. In most subsequent analyses of financially vulnerable Wisconsin residents, those in the 90th percentile and above (the top decile) of financial insecurity were selected for

investigation. This segmentation roughly corresponds to the adult poverty rate, which was approximately 12% based on the most recent ACS 5-year estimates.

Modeling of financial insecurity for state of Wisconsin

The methods described in the previous section resulted in an augmented survey dataset, with raw response data as well as an overall percentile rating of financial security, for those Wisconsin residents who participated in the survey. The next step in the analysis was to extrapolate from the survey sample to a rating for the entire state population, in order to provide more fine-grained information about the contours of financial need in Wisconsin by region and demographic segment.

Because the financial security scale for an individual is computed based on his/her survey responses, it cannot be calculated for individuals who did not take the survey. However, it is possible to *estimate* it based on other individual attributes. In order to create individual estimates for Wisconsin adults, a statistical model was created that mapped individual characteristics from a consumer data file to a point on the financial security scale. Survey respondents, for whom both financial security ratings and consumer file attributes were available, were used for model training, and the resulting model was used to impute financial security ratings to the remaining state population.

Multiple models were considered, including an elastic net linear regression model (Zou & Hastie, 2005) and a random forest regressor (Ho, 1995), but the final, best-fitting model used for prediction was an *xgboost* regressor (Chen, 2016). Missing values in features input to the model were imputed as the mean of observed feature values, and the model's *max_tree_depth* and *n_estimators* hyperparameters chosen by means of a cross-validated grid search. Other hyperparameters were set to default values. The model used a total of 211 features from the consumer file, with a sample of the most important listed in Table 3.

Table 2: Most important features in individual-level financial security model

Importance Rank	Feature
1	Parenthood flag
2	Marital status flag
3	Home ownership flag
4	Age
5	Ethnicity flag
6	High Income Flag
7	Health insurance status
8	Census block home ownership percentage
9	Home value bucket
10	Census block higher education enrollment

The predictions of the final model displayed a Pearson correlation of 0.52 with survey-based financial security ratings, and a root mean squared error of 0.73 on the theta scale output by the IRT model. Figure 1 demonstrates the spread between survey-based financial security ratings and those predicted by the *xgboost* model, on the theta scale. The range of the modeled insecurity scores is narrower than that of the survey-based scores due to the typical shrinkage in estimates seen in regression tasks.
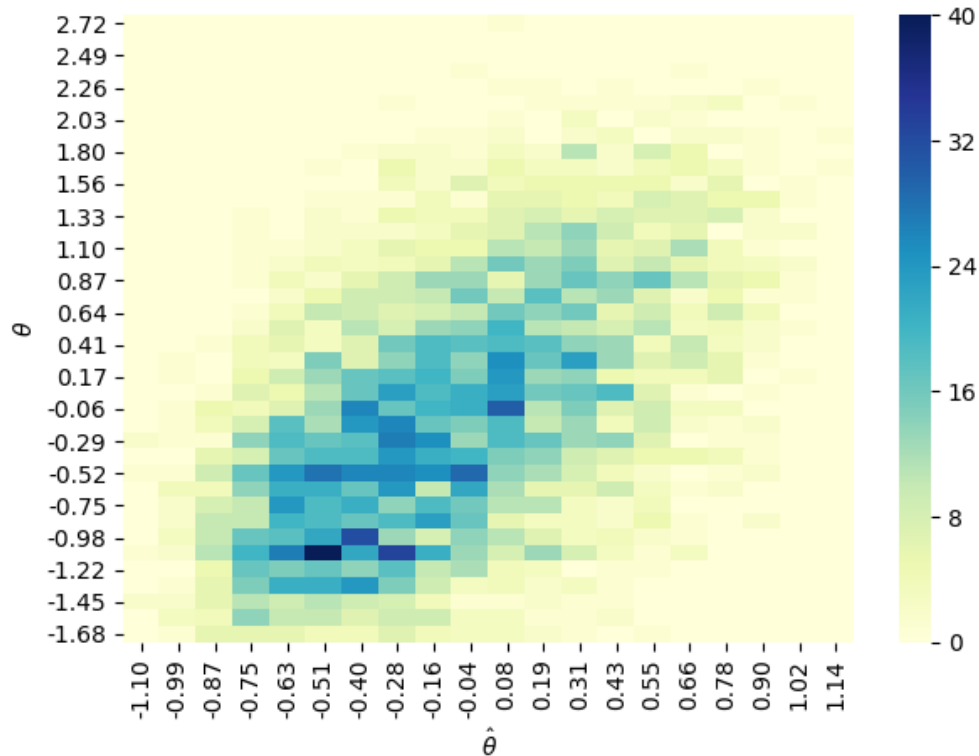
Figure 1: Heatmap of survey-based (theta) and cross-validated xgboost estimates (theta-hat) of financial security. Lower values of theta indicate higher levels of financial security. Axis labels correspond to the midpoint on the scale associated with each bin.

The model is far from perfect, as is to be expected based on the limited number of attributes available to use in prediction. However, it is sufficient to qualitatively demonstrate areas of greatest need in visualizations.

The modeled financial insecurity ratings for each Wisconsin adult allowed summaries to be produced at an arbitrarily granular level for geographic subregions of the state, and for demographic groups. Figure 2 presents a screenshot from an interactive map (referenced in Appendix 3) which allows interactive exploration of these scores for Wisconsin. In order to preserve the privacy of individual residents, results are masked for groups of less than 100 residents.

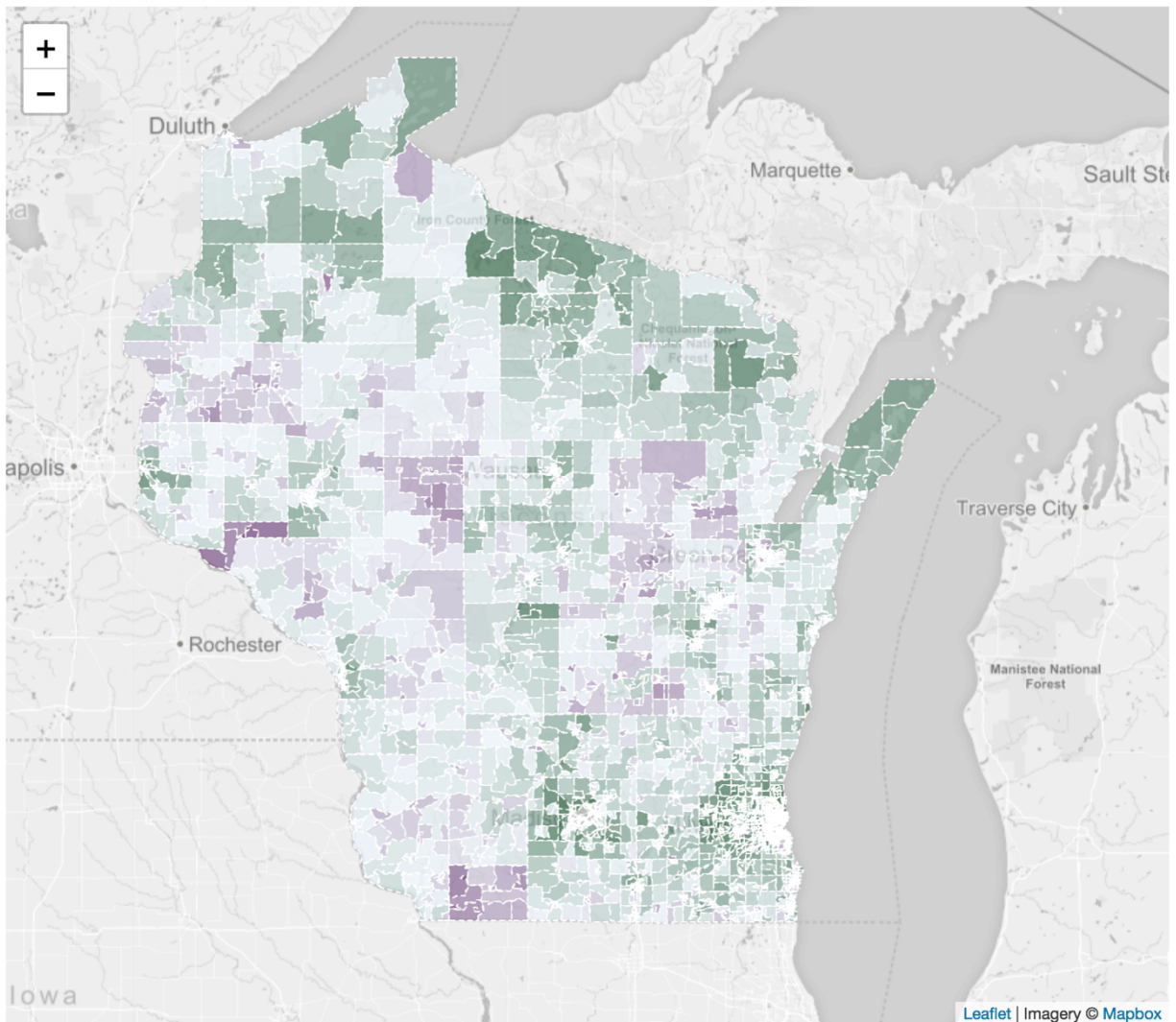## Median financial security in Wisconsin by census block

Figure 2: Median financial insecurity on IRT-derived scale for each census block group in Wisconsin. Dark green indicates the most financially secure areas, while dark purple areas have the greatest financial insecurity. Census block groups in urban areas are too small to view here, but can be inspected using the zoom tool in the interactive map.

Findings

A summary of results is presented in three sections: an overview of the demographic characteristics of the population surveyed, summaries of responses to individual survey items, and key findings related to characteristics of the least financially secure segment of the population surveyed.

For each question, summaries are provided both for the *weighted* survey results (adjusted to reflect the population of Wisconsin) and the *unweighted* (raw) survey results. The former are more suitable for drawing inferences about the situation in the state as a whole, while the latter are a direct reflection of the population surveyed.

Demographic characteristics

Age	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
18-24	1.9%	0.7%	0.9%	0.3%
25-34	13.3%	1.7%	10.0%	0.9%
35-44	15.7%	1.8%	15.3%	1.1%
45-54	19.4%	2.0%	20.2%	1.2%
55-64	21.2%	2.0%	26.6%	1.4%
65+	28.6%	2.2%	27.1%	1.4%

Employment Status	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Working full-time	51.2%	2.5%	46.7%	1.5%
Working part-time	12.9%	1.7%	15.1%	1.1%
Not currently working	35.9%	2.4%	38.2%	1.5%

Gender	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Male	46.6%	2.5%	32.7%	1.4%
Female	53.4%	2.5%	67.2%	1.4%
Neither of these describes me well	0.02%	0.06%	0.07%	0.08%

Race / Ethnicity	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
White	88.4%	1.6%	94.1%	0.7%
Black or African American	5.0%	1.1%	2.3%	0.5%
Hispanic or Latino/a	2.8%	0.8%	1.1%	0.3%
Asian	0.5%	0.3%	0.4%	0.2%
American Indian or Alaska Native	0.8%	0.5%	0.6%	0.2%
Other race	2.5%	0.8%	1.5%	0.4%

Education	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
No high school diploma	1.2%	0.5%	0.5%	0.2%
High school diploma or equivalent	18.3%	1.9%	14.4%	1.1%
Some college, but no degree	21.2%	2.0%	21.1%	1.3%
Associate's degree	15.5%	1.8%	14.3%	1.1%
Bachelor's degree	29.2%	2.3%	32.3%	1.4%
Advanced degree (such as Master's, Professional, or Doctorate degree)	14.7%	1.8%	17.4%	1.2%

Income	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Under $25,000	17.0%	1.9%	9.9%	0.9%
$25,000-$50,000	25.7%	2.2%	22.2%	1.3%
$50,001-$75,000	20.9%	2.0%	22.2%	1.3%
$75,001-$100,000	12.3%	1.6%	20.5%	1.2%
$100,001-$150,000	14.6%	1.8%	16.5%	1.1%
More than $150,000	9.6%	1.5%	8.8%	0.9%

Marital Status	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Married	58.0%	2.5%	65.4%	1.5%
Divorced	15.6%	1.8%	12.1%	1.0%
Separated	0.9%	0.5%	0.9%	0.3%
Widowed	4.4%	1.0%	4.8%	0.7%
Never married	21.2%	2.0%	16.8%	1.1%

Response summaries

Note that not all questions were administered to all survey respondents. See Appendix 2 for skip logic.

Household Block

Is the house or apartment where you live owned by you or someone in your household, or is it rented from another owner?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Owned by me	68.3%	2.3%	76.3%	1.3%
Owned by someone in my household	6.8%	1.3%	6.1%	0.7%
Rented	24.9%	2.2%	17.7%	1.2%

Which of the following people live in the same household as you? Select all that apply.

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
My legal husband or wife	57.3%	2.5%	64.7%	1.5%
My opposite-sex civil union partner	2.7%	0.8%	1.9%	0.4%
My same-sex civil union partner	0.4%	0.3%	0.4%	0.2%
My opposite-sex partner or de facto boyfriend or girlfriend	7.2%	1.3%	5.4%	0.7%
My same-sex partner or de facto boyfriend or girlfriend	0.3%	0.3%	0.4%	0.2%
My mother and/or father	3.7%	0.9%	2.9%	0.5%
My son(s) and/or daughter(s)	25.5%	2.2%	28.5%	1.4%
My brother(s) and/or sister(s)	1.2%	0.5%	1.2%	0.3%
My roommate(s)	2.4%	0.8%	1.7%	0.4%
I live alone	21.1%	1.0%	18.1%	1.2%
Other	2.5%	0.8%	2.2%	0.4%

How many children/stepchildren do you have who are financially dependent on you, or on the spouse/partner who lives with you? Please include children/stepchildren not living at home with you and your spouse/partner.

	Weighted responses		Unweighted responses	
	Percentage	**Margin of error**	**Percentage**	**Margin of error**
1	12.1%	1.6%	12.7%	1.0%
2	11.8%	1.6%	12.5%	1.01%
3	4.0%	1.0%	4.5%	0.6%
4 or more	2.5%	0.8%	2.7%	0.5%
No financially dependent children at all	69.7%	2.3%	67.6%	1.4%

Are any of your dependent children under the age of 5?

	Weighted responses		Unweighted responses	
	Percentage	**Margin of error**	**Percentage**	**Margin of error**
Yes	23.8%	3.7%	22.6%	2.3%
No	76.2%	3.7%	77.4%	2.3%

Have you moved to a new home within the last 12 months?

	Weighted responses		Unweighted responses	
	Percentage	**Margin of error**	**Percentage**	**Margin of error**
Yes	8.5%	1.4%	7.9%	0.8%
No	91.5%	1.4%	92.1%	0.8%

Was your most recent move mostly voluntary (for example, to be closer to work or school, due to a change in family status, or to improve your neighborhood), or was it mostly involuntary (for example, due to an eviction, foreclosure, rent increase or threatened action)?

	Weighted responses		Unweighted responses	
	Percentage	**Margin of error**	**Percentage**	**Margin of error**
Yes	89.1%	5.5%	89.2%	3.4%
No	10.9%	5.5%	10.8%	3.4%

Employment and income block

Which of the following best describes your current employment or work status?

	Weighted responses		Unweighted responses	
	Percentage	**Margin of error**	**Percentage**	**Margin of error**
Self-employed	4.8%	1.1%	5.4%	0.7%
Work full-time for an employer or the military	45.8%	2.5%	41.6%	1.5%
Work part-time for an employer or the military	9.5%	1.5%	10.5%	0.9%
Work more than 30 hours a week on average for multiple employers	2.3%	0.7%	2.1%	0.4%
Homemaker	3.2%	0.9%	5.4%	0.7%
Full-time student	0.7%	0.4%	0.5%	0.2%
Permanently sick, disabled, or unable to work	3.5%	0.9%	3.3%	0.5%
Unemployed or temporarily laid off	2.7%	0.8%	2.0%	0.4%
Retired	26.1%	2.2%	28.3%	1.4%
Prefer not to say	1.5%	0.6%	0.8%	0.3%

Is the income associated with your primary occupation hourly or salaried?

	Weighted responses		Unweighted responses	
	Percentage	*Margin of error*	*Percentage*	*Margin of error*
Hourly	58.7%	3.2%	58.8%	2.1%
Salaried	41.3%	3.2%	41.2%	2.1%

Over the past 12 months, did your household receive any of the following types of income? Check all that apply.

	Weighted responses		Unweighted responses	
	Percentage	*Margin of error*	*Percentage*	*Margin of error*
Salaries, wages, tips, or military pay	59.2%	2.4%	62.0%	1.5%
Freelance pay, such as babysitting, selling goods online, driving for a ride-sharing service, or other pic k-up work (Note: do not include survey response work)	6.0%	1.2%	6.9%	0.8%
Payments from a pension plan	19.3%	2.0%	23.3%	1.3%
Withdrawals from retirement accounts (e.g., 401(k), IRA, TSP, Keogh)	14.0%	1.7%	16.8%	1.1%
Withdrawals from non-retirement savings accounts	6.5%	1.2%	8.1%	0.8%
Social Security retirement benefits	30.6%	2.3%	31.0%	1.4%
Other federal or state benefits (e.g., unemployment, disability, SSI, TANF)	8.4%	1.4%	7.9%	0.8%
Income from a business	6.8%	1.3%	8.2%	0.8%
Renting out property, such as your car, your place of residence, or other items you own, through websites, newspaper ads, flyers, etc.	2.7%	0.8%	3.4%	0.6%
Borrowing against a credit card	3.6%	0.9%	4.5%	0.6%
Borrowing against an asset, such as a reverse mortgage or home equity line of credit	2.1%	0.7%	2.5%	0.5%
Money from family members who do not live in your household	4.4%	1.0%	4.4%	0.6%
None of these	10.4%	1.5%	8.5%	0.9%

Over the past 12 months, how predictable has your income been from month to month?

	Weighted responses		Unweighted responses	
	Percentage	*Margin of error*	*Percentage*	*Margin of error*
Very predictable	62.2%	2.4%	64.3%	1.5%
Moderately predictable	28.7%	2.3%	27.5%	1.4%
Somewhat unpredictable	6.6%	1.2%	5.7%	0.7%
Very unpredictable	2.6%	0.8%	2.5%	0.5%

Financial indicator block

Over the past year, how would you describe your household's income and expenses?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Generally spend much less than income	16.9%	1.9%	17.9%	1.2%
Generally spend a little less than income	34.8%	2.4%	36.6%	1.5%
Generally spend about equal to income	33.1%	2.3%	30.9%	1.4%
Generally spend a little more than income	10.8%	1.5%	11.6%	1.0%
Generally spend much more than income	4.4%	1.0%	3.0%	0.5%

Over the past 12 months, which of the following statements best describes how well your household is keeping up with its bills? Please consider rent, utility, phone, and credit card bills.

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Pay all bills on time	80.3%	2.0%	82.4%	1.2%
Pay most bills on time	14.7%	1.8%	13.7%	1.1%
Pay some bills on time	3.4%	0.9%	1.9%	0.5%
Pay very few bills on time	1.7%	0.6%	1.1%	0.3%

How long could your household make ends meet if you lost your main source of income and had to live off savings that are readily available to cover basic monthly expenses (such as housing, food, taxes, healthcare, etc.)? Please consider money in your checking account, savings account, on prepaid cards, and in cash.

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
6 months or more	44.8%	2.5%	51.4%	1.5%
At least 3 months, but less than 6 months	21.6%	2.0%	20.0%	1.2%
At least 1 month, but less than 3 months	16.0%	1.8%	14.0%	1.1%
At least 1 week, but less than 1 month	9.1%	1.4%	8.0%	0.8%
Less than 1 week	8.6%	1.4%	6.7%	0.8%

How confident are you that your household is taking the steps needed to ensure that you will have enough money saved for your long-term financial goals (such as buying a home, launching a business, starting a family, helping pay for education, planning for retirement, etc.)? Please consider money saved in retirement funds, stocks and bonds, other long-term savings accounts, and money not kept in a bank.

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Very confident	30.3%	2.3%	34.8%	1.5%
Moderately confident	30.8%	2.3%	31.8%	1.4%
Slightly confident	19.4%	2.0%	17.5%	1.2%
Not at all confident	19.4%	2.0%	16.0%	1.1%

As of today, how would you describe your household's current level of debt? Please consider money owed on bank loans, student loans, medical debt, past-due utilities, money owed to friends and family, and any credit card balances carried over from the previous month.

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Do <u>not have any</u> debt	26.3%	2.2%	27.4%	1.4%
Have a <u>manageable</u> amount of debt	47.3%	2.5%	49.4%	1.5%
Have a <u>bit too much</u> debt	17.7%	1.9%	15.8%	1.1%
Have <u>far too much</u> debt	8.6%	1.4%	7.4%	0.8%

How confident are you that your household's insurance policies will provide you with enough support in case of an emergency? Please consider the amount of coverage you have for your health insurance, vehicle insurance, home/rental insurance, life insurance and disability insurance.

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Very confident	33.2%	2.3%	35.4%	1.5%
Moderately confident	37.8%	2.4%	39.9%	1.5%
Slightly confident	15.0%	1.8%	14.6%	1.1%
Not at all confident	8.5%	1.4%	6.7%	0.8%
I don't have any insurance	5.4%	1.1%	3.4%	0.6%

Financial services block

Do you currently make use of…

	Weighted Responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
A checking account?	95.3%	1.1%	97.4%	0.5%
A savings account?	80.5%	2.0%	85.1%	1.1%
A personal retirement account or other investment account?	66.0%	2.4%	73.7%	1.4%
A credit card?	84.0%	1.8%	88.6%	1.0%
A debit card linked to a bank account?	75.8%	2.1%	77.6%	1.3%
A prepaid card that is not linked to a bank account?	6.2%	1.2%	5.5%	0.7%

Over the past 12 months, have you…

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Taken out an auto title loan? (Note: Auto title loans are loans where a car title is used to borrow money for a short period of time. They are NOT loans used to purchase an automobile.)	4.1%	1.0%	3.6%	0.6%
Taken out a short term "payday" loan?	3.1%	0.9%	2.5%	0.5%
Gotten a tax refund anticipation loan, or use a tax preparation service in order to receive your tax refund faster than the IRS would provide it?	11.2%	1.6%	10.1%	0.9%
Used a pawn shop?	1.7%	0.7%	1.9%	0.4%
Used a rent-to-own store?	0.6%	0.4%	0.7%	0.3%

Events block

Sometimes, households experience unexpected events. In the last 12 months, please tell us if any of the following happened to your household. Select all that apply.

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Someone in the household brought in less income than expected due to unemployment, a pay cut, or reduced hours	10.2%	1.5%	10.2%	0.9%
Someone in the household divorced, separated or was widowed from a spouse or partner	2.5%	0.8%	1.8%	0.4%
Someone in the household lost their health insurance	3.9%	1.0%	4.2%	0.6%
Someone in the household experienced a costly medical emergency	10.7%	1.5%	10.6%	0.9%
Someone in the household had retirement benefits at work cut substantially (including having an employer ask them to cover more of these costs)	1.0%	0.5%	1.0%	0.3%
The value of your investments or retirement funds decreased substantially	1.3%	0.6%	1.6%	0.4%
The value of your house decreased substantially	1.9%	0.7%	1.3%	0.4%
Someone in the household spent a substantial sum helping out your extended family	3.3%	0.9%	3.6%	0.6%
A major repair or replacement was needed for your home, large appliances, or vehicle	22.3%	2.1%	24.7%	1.3%
None of these	60.0%	2.4%	59.0%	1.5%

In the last 12 months, have you or someone in your immediate family experienced any of the following?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Being a victim of a crime?	3.8%	0.9%	4.0%	0.6%
Having problem with alcohol abuse?	2.9%	0.8%	3.2%	0.5%
Having problem with drug abuse?	1.7%	0.6%	1.8%	0.4%
Experiencing physical abuse by a family member?	0.7%	0.4%	0.7%	0.3%

At any time in the last 12 months, have you...

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Failed to pay a bill for several months because you couldn't afford to?	10.1%	1.5%	8.8%	0.9%
Gone without health insurance because you couldn't afford it?	5.1%	1.1%	4.4%	0.6%
Been hungry because you couldn't pay for food?	5.7%	1.2%	4.3%	0.6%
Not gone to the doctor because of the cost?	16.6%	1.9%	15.7%	1.1%
Not taken a child to the doctor because of the cost?	1.7%	0.6%	2.1%	0.4%
Not filled a medical prescription because of the cost?	9.7%	1.5%	9.5%	0.9%
Taken money out of your retirement savings to pay your current bills?	8.7%	1.4%	9.4%	0.9%
Gotten so far into debt that you felt you could never get out?	10.5%	1.5%	8.9%	0.9%
Gotten so far into debt that you had to declare bankruptcy?	1.3%	0.6%	1.3%	0.3%

In the past week, have you felt...

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Like you didn't want to eat; that your appetite was poor?	12.2%	1.6%	9.6%	0.9%
Bothered by things that usually don't bother you?	16.4%	1.8%	14.2%	1.1%
Like everything you did was an effort?	20.5%	2.0%	17.9%	1.2%
That you could not shake off the blues, even with help from family or friends?	13.5%	1.7%	11.5%	1.0%
That your sleep was restless?	37.5%	2.4%	61.8%	1.5%

Hard times are sometimes made easier knowing you can get help in a time of need. If you were to experience economic hardship, how confident are you that another adult in your household could get additional work to bring in more money?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Not at all confident	35.1%	2.4%	30.5%	1.4%
Slightly confident	23.7%	2.1%	23.5%	1.3%
Moderately confident	21.6%	2.0%	24.3%	1.3%
Very confident	19.5%	2.0%	21.7%	1.3%

Hard times are sometimes made easier knowing you can get help in a time of need. If you were to experience economic hardship, how confident are you that you could move into a friend's or family member's home to reduce housing expenses?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Not at all confident	34.7%	2.4%	33.1%	1.4%
Slightly confident	24.4%	2.1%	24.5%	1.3%
Moderately confident	20.5%	2.0%	21.6%	1.3%
Very confident	20.4%	2.0%	20.8%	1.2%

Hard times are sometimes made easier knowing you can get help in a time of need. If you were to experience economic hardship, how confident are you that you could borrow money from a close friend or relative?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Not at all confident	30.1%	2.3%	26.9%	1.4%
Slightly confident	26.3%	2.2%	26.2%	1.4%
Moderately confident	23.0%	2.1%	24.7%	1.3%
Very confident	20.7%	2.0%	22.2%	1.3%

Hard times are sometimes made easier knowing you can get help in a time of need. If you were to experience economic hardship, how confident are you that if other family members needed financial support, you could share that cost with other relatives?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Not at all confident	28.5%	2.2%	24.8%	1.3%
Slightly confident	32.1%	2.3%	31.9%	1.4%
Moderately confident	24.2%	2.1%	26.3%	1.4%
Very confident	15.2%	1.8%	17.1%	1.2%

Hard times are sometimes made easier knowing you can get help in a time of need. If you were to experience economic hardship, how confident are you that if retirement proved more expensive than you could afford, you could move in with family or friends as you got older?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Not at all confident	38.2%	2.4%	34.7%	1.5%
Slightly confident	27.9%	2.2%	29.1%	1.4%
Moderately confident	20.6%	2.0%	22.1%	1.3%
Very confident	13.3%	1.7%	14.1%	1.1%

Care and transportation block

Do you have access to a reliable mode of transportation? Select all that apply.

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Yes, I own a vehicle	90.8%	1.4%	93.3%	0.8%
Yes, I lease a vehicle	4.4%	1.0%	4.7%	0.7%
Yes, I borrow or share a vehicle	1.8%	0.7%	1.6%	0.4%
Yes, I use public transportation	3.6%	0.9%	2.9%	0.5%
Yes, I bicycle or walk	6.6%	1.2%	7.4%	0.8%
No reliable access	1.6%	0.6%	0.9%	0.3%

Do you have health insurance?

	Weighted responses		Unweighted responses	
	Percentage	Margin of error	Percentage	Margin of error
Yes	96.0%	1.0%	96.9%	0.5%
No	4.0%	1.0%	3.1%	0.5%

Are you currently covered by any of the following types of health insurance or health coverage plans? Select all that apply.

	Weighted responses		Unweighted responses	
	Percentage	**Margin of error**	**Percentage**	**Margin of error**
Insurance through a current or former employer or union (mine or that of a family member)	59.4%	2.5%	62.7%	1.5%
Insurance purchased directly from an insurance company (by myself or by a family member)	10.8%	1.6%	12.9%	1.0%
Medicare, for people 65 or older, or people with certain disabilities	30.2%	2.3%	28.8%	1.4%
Medicaid, BadgerCare, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability	10.5%	1.6%	7.7%	0.8%
TRICARE or other military health care	1.8%	0.7%	1.8%	0.4%
VA (either past or present enrollment or use of VA health care)	3.2%	0.9%	2.5%	0.5%
Indian Health Service	0.1%	0.2%	0.1%	0.1%
Other	2.1%	0.7%	2.3%	0.5%

What arrangement do you use primarily for childcare?

	Weighted responses		Unweighted responses	
	Percentage	**Margin of error**	**Percentage**	**Margin of error**
My child goes to a child care center	28.7%	8.3%	24.8%	4.9%
My child goes to a family childcare provider whose business provides care for children in their home	4.5%	3.8%	7.0%	2.9%
Someone who is related to me takes care of my child in my home	16.4%	6.8%	12.4%	3.7%
Someone who is related to me takes care of my child in their home	7.7%	4.9%	9.0%	3.3%
Someone who is not related to me cares for my child in my home	3.5%	3.4%	2.3%	1.7%
Someone who is not related to me cares for my child in their home	5.7%	4.2%	3.7%	2.1%
I care for my child in my home	33.4%	8.6%	40.8%	5.6%

Current financial standing block

Compared to 12 months ago, would you say that you are better off, the same, or worse off financially?

	Weighted responses		Unweighted responses	
	Percentage	**Margin of error**	**Percentage**	**Margin of error**
Better off	28.5%	2.2%	28.5%	1.4%
The same	55.8%	2.5%	58.7%	1.5%
Worse off	15.8%	1.8%	12.8%	1.0%

Findings for least secure respondents

Of course, the top-line results of the survey provide only a broad characterization of the state as a whole. More detailed information about specific groups of Wisconsin residents can be obtained using the online survey exploration tool or by downloading the raw survey data (see Appendix 3).

Another way of drilling into the findings, though, is to intersect the survey response data with the financial security scale developed using item response theory. Examining survey response patterns for individuals at different ends of the financial

security spectrum can bring particular areas of need into high relief. While there are too many variables (survey questions, demographic and geographic groups, insecurity levels) for a comprehensive summary of all interactions in the survey data, the following tables show some striking patterns in the response data broken down by financial security level.

One way of looking at the divide between the most and least secure Wisconsin residents is by comparing response patterns at the top and bottom of the security scale for our high-level financial indicators adapted from the CFSI Financial Health Pulse. The following table shows the percentage of respondents selecting particular options for those in the *least secure decile*, the respondent population as a whole, and the *most secure four deciles*.

Question: Over the past year…	Response(s)	Least secure 10%	All respondents	Most secure 40%
How would you describe your household's income and expenses?	spend more / much more than income	46%	15%	5%
Which of the following statements best describes how well your household is keeping up with its bills?	all bills on time	28%	80%	98%
How long could your household make ends meet if you lost your main source of income?	at least 1 month	24%	82%	100%
How confident are you that your household is taking the steps needed to ensure that you will have enough money saved for your long-term financial goals?	not at all	80%	19%	1%
As of today, how would you describe your household's current level of debt?	a bit/far too much	82%	25%	3%
How confident are you that your household's insurance policies will provide you with enough support in case of an emergency?	not at all / no insurance	60%	14%	3%

In aggregate, this table shows the vulnerability of ten percent of Wisconsin's population relative to their fellow residents. Their financial needs are out of alignment with their resources, and they are poorly equipped to deal with financial shocks that may occur.

In fact, the survey instrument asked participants specifically about their exposure to financial shocks, and 62% of those in the least secure 10% indicated that they had experienced at least one shock among the types we listed *within the prior 12 months*:

Rank	Shock	Percentage of least secure 10% experiencing in prior year
1	A major repair or replacement was needed for your home, large appliances, or vehicle	32%
2	Someone in the household brought in less income than expected due to unemployment, a pay cut, or reduced hours	28%
3	Someone in the household experienced a costly medical emergency	19%
4	Someone in the household lost their health insurance	11%
5	Someone in the household divorced, separated or was widowed from a spouse or partner	7%
6	Someone in the household spent a substantial sum helping out your extended family	5%
7	The value of your house decreased substantially	3%
8	The value of your investments or retirement funds decreased substantially	3%
9	Someone in the household had retirement benefits at work cut substantially	2%

While disruptions to income and health problems occurred frequently, the most frequent type of financial shock encounter had to do with unanticipated necessary repairs to property.

A block of this survey's questions also focused on types of challenges that Wisconsin residents frequently face due to financial need. The following table again shows the frequency with which respondents in the most insecure 10% indicated they had encountered a given issue *in the prior year*.

Rank	Issue	Percentage of least secure 10% experiencing in prior year
1	Have you not gone to the doctor because of the cost?	58%
2	Have you gotten so far into debt that you felt you could never get out?	54%
3	Have you failed to pay a bill for several months because you couldn't afford to?	51%
4	Have you not filled a medical prescription because of the cost?	40%
5	Have you been hungry because you couldn't pay for food?	37%
6	Have you gone without health insurance because you couldn't afford it?	27%
7	Have you taken money out of your retirement savings to pay your current bills?	20%
8	Have you not taken a child to the doctor because of the cost?	10%
9	Have you gotten so far into debt that you had to declare bankruptcy?	8%

Strikingly, 37% of these respondents reported having experienced hunger due to financial need in the prior 12-month period. Many respondents also reported having to compromise on bill payment, insurance, medication, or health care (even sometimes for children).

Five of our survey questions focused on the level of support that respondents receive from their circle of family and friends (see question Q32 in Appendix 2). Each of these questions asks how confident the respondent is that they could rely on their support network in specific times of need. The following table breaks down the average number of questions (out of a possible 5) to which respondents at different levels of financial insecurity responded that they were *Not at all confident* (the lowest possible category).

Percentage indicating they were "not at all confident" in support from their network		
Least secure 10%	All respondents	Most secure 10%
3.00	1.67	1.08

Respondents in the least secure decile indicated that they could not rely on support from family and friends in most of the types of dire circumstances we asked about – a clear difference from those in more stable financial condition, and the respondent population as a whole.

A similar pattern is observed in the number of negative mental health indicators reported across financial security levels (Q31). As the following table shows, respondents in the lowest financial security decile responded affirmatively to almost half of the five relevant questions – approximately six times the rate of those in the highest decile.

Percentage responding "yes" to negative mental health indicators		
Least secure 10%	All respondents	Most secure 10%
2.42	0.99	0.36

Other areas we hoped to learn about with this survey were housing and transportation insecurity. Relating to the former, our survey revealed that only 9% of respondents in the least secure decile had changed their residence in the past year. However, of those who did move, 50% did so involuntarily (e.g., due to an eviction, foreclosure, rent increase or threatened action). The following table summarizes the survey results related to transportation.

Rank	Response to "Do you have access to a reliable mode of transportation"	Percentage of least secure 10% selecting option
1	Yes; I own a vehicle	77%
2	Yes; I bicycle or walk	9%
3	No reliable access	7%
4	Yes; I borrow or share a vehicle	6%
5	Yes; I use public transportation	4%
6	Yes; I lease a vehicle	3%

Perhaps surprisingly, only 7% of the least financially secure respondents indicated that they had no reliable access to transportation. Most respondents in this category reported that they met their transportation needs with a personal vehicle (that they own, lease, borrow or share), while a relatively small minority reported using public transportation, bicycling or walking.

Conclusion

This report has presented an overview of a survey project to examine the distribution of financial insecurity in the state of Wisconsin and its interrelationships with other issues encountered by Wisconsin families. This survey was relatively large in scope, both in terms of the breadth of the survey instrument and in terms of the number of individuals we were able to survey. It also involved the application of novel statistical methodology: neither our use of item response theory to develop a scale of financial security nor our use of a predictive model to generalize the findings to the state as a whole are yet established practice in survey science.

Our initial analysis of the survey results puts the struggles of some Wisconsin families into sharp relief. Wisconsin families living at or near the poverty line face a constellation of interrelated challenges, including

- lack of sufficient income,
- unpredictable shifts in income and expenses,
- excessive debt,
- lack of access to financial services,
- lack of an interpersonal support network,
- threats to housing security, and
- stress or other disruptions of mental health.

However, the survey data set we have collected is richer than can adequately be summarized in this report. It contains raw survey response data as well as demographic and geographical covariates, and the financial security scale variable we derived through IRT -- any and all of which can be intersected and compared.

Finally, the caveats noted at the beginning of this report should be acknowledged again.

First, this report and the underlying data provide a single methodological lens through which the issues of financial insecurity in Wisconsin can be viewed, and that lens has certain limitations. Using a custom survey has allowed us to develop a very rich data set covering a diverse range of interrelated topics, and to get a large enough sample size to facilitate sophisticated modeling techniques. However, the most vulnerable residents of the state are likely to be undercounted using any survey methods, so it is important to bear that in mind when interpreting the results. Note in particular the significant gap between the weighted proportion of survey respondents with a high school education (98.8%) and the statewide figure for high-school completion from the American Community Survey (91.4%). Such a gap suggests that Wisconsin residents experiencing severe financial insecurity may be underrepresented in this survey specifically, and the findings should be understood as a lower bound on the problems facing Wisconsin residents generally. This survey-based perspective should be augmented with ethnographic work and the perspectives of service providers directly aiding financially struggling families in the state. Another lens on the condition of struggling families in Wisconsin is provided by non-survey-based statistical measures such as the Wisconsin Poverty Measure and other metrics tracked in the Wisconsin Poverty Report from the UW Institute for Research on Poverty (Smeeding & Thornton, 2018).

Second, the response patterns observed here to be associated with low financial security cannot be established from this survey data alone as being either causal drivers of insecurity or causes of insecurity. Research to establish causal connections would require a different (and very challenging) study design.

Bearing these limitations in mind, we hope that other researchers will find this data and our approach to be valuable in addressing questions beyond the scope of this report and in designing future studies with similar aims. Bringing together multiple methodological perspectives on these problems will provide the best foundation for policy and prioritization decisions tailored to address them.

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Appendix 1: Prior Surveys on Poverty and Financial Insecurity

Survey	Commissioning Organization	Reference	Link
Financial Health Pulse	Center for Financial Services Innovation		https://cfsinnovation.org/research/u-s-financial-health-pulse-press-release/
Consumer Financial Health Study	Center for Financial Services Innovation		http://cfsinnovation.org/research/consumer-financial-health-study/
Survey of Household Economic Decision-making	US Federal Reserve		https://www.federalreserve.gov/consumerscommunities/shed.htm
National Financial Capability Study	FINRA Investor Education Foundation		http://www.usfinancialcapability.org/about.php
Survey of Economic Risk Perceptions and Insecurity	Economic Security Index	Hacker, J., P. Rehm & M. Schlesinger. (2010). "Standing on Shaky Ground: Americans' Experiences with Economic Insecurity." Rockefeller Foundation.	http://www.economicsecurityindex.org/?p=serpi
Survey of Economic Expectations	University of Wisconsin Survey Center	Dominitz, J, & C. Manski. (1997). Perceptions of Economic Insecurity: Evidence from the Survey of Economic Expectations. *Public Opinion Quarterly* 61:2(1), pp. 261–287.	http://www.disc.wisc.edu/archive/econexpect/index.html
Wisconsin Families Study	University of Wisconsin Survey Center	Manski, C. & J. Straub. (2000). Worker Perceptions of Job Insecurity in the Mid-1990s: Evidence from the Survey of Economic Expectations. *Journal of Human Resources* 35(2), pp. 447-479.	https://uwsc.wisc.edu/#WiscFams
Poverty in America	National Public Radio		https://www.npr.org/programs/specials/poll/poverty/summary.html
Poverty Survey	American Enterprise Institute		http://www.aei.org/publication/2016-poverty-survey/
Americans' Financial Security	PEW Charitable Trusts		http://www.pewtrusts.org/~/media/assets/2015/03/fsm-poll-results-toplines_artfinal_v3.pdf
National Survey of Unbanked and Underbanked Households	Federal Deposit Insurance Corporation		https://www.fdic.gov/householdsurvey/

Appendix 2: Survey Instrument

Demographic block

Q1 What year were you born?
Please enter the 4 digit year below.

_____

Q2 Please select your gender.

◯ Female (1)

◯ Male (2)

◯ Neither of these describes me well (3)

Q3 In which state do you currently live?

○ American Samoa (1)

○ Alabama (2)

○ Alaska (3)

○ Arizona (4)

○ Arkansas (5)

○ California (6)

○ Colorado (7)

○ Connecticut (8)

○ Delaware (9)

○ District of Columbia (10)

○ Florida (11)

○ Georgia (12)

○ Hawaii (13)

○ Idaho (14)

○ Illinois (15)

○ Indiana (16)

○ Iowa (17)

○ Kansas (18)

○ Kentucky (19)

○ Louisiana (20)

○ Maine (21)

○ Maryland (22)

○ Massachusetts (23)

○ Michigan (24)

○ Minnesota (25)

○ Mississippi (26)

- ○ Missouri (27)
- ○ Montana (28)
- ○ Nebraska (29)
- ○ Nevada (30)
- ○ New Hampshire (31)
- ○ New Jersey (32)
- ○ New Mexico (33)
- ○ New York (34)
- ○ North Carolina (35)
- ○ North Dakota (36)
- ○ Ohio (37)
- ○ Oklahoma (38)
- ○ Oregon (39)
- ○ Pennsylvania (40)
- ○ Rhode Island (41)
- ○ South Carolina (42)
- ○ South Dakota (43)
- ○ Tennessee (44)
- ○ Texas (45)
- ○ Utah (46)
- ○ Vermont (47)
- ○ Virginia (48)
- ○ Washington (49)
- ○ West Virginia (50)
- ○ Wisconsin (51)
- ○ Wyoming (52)
- ○ None of the above (53)

Q4 Choose the race that you consider yourself to be:

○ White (1)

○ Black or African American (2)

○ Hispanic or Latino/a (3)

○ Asian (4)

○ American Indian or Alaska Native (5)

○ Other race (6)

Q5 What is the highest level of school you have completed or the highest degree you have received?

○ No high school diploma (1)

○ High school diploma or equivalent (2)

○ Some college, but no degree (3)

○ Associate's degree (4)

○ Bachelor's degree (5)

○ Advanced degree (such as Master's, Professional, or Doctorate degree) (6)

Q6 What is your current marital status?

○ Married (1)

○ Divorced (2)

○ Separated (3)

○ Widowed (4)

○ Never married (5)

Household block

Q7 Is the house or apartment where you live owned by you or someone in your household, or is it rented from another owner?

○ Owned by me (1)

○ Owned by someone in my household (2)

○ Rented (3)

Q8 Which of the following people live in the same household as you? Select all that apply:

☐ My legal husband or wife (1)

☐ My opposite-sex civil union partner (2)

☐ My same-sex civil union partner (3)

☐ My opposite-sex partner or de facto boyfriend or girlfriend (4)

☐ My same-sex partner or de facto boyfriend or girlfriend (5)

☐ My mother and/or father (6)

☐ My son(s) and/or daughter(s) (7)

☐ My brother(s) and/or sister(s) (8)

☐ My roommate(s) (9)

☐ I live alone (10)

☐ Other (11) _____

Q9 How many children/stepchildren do you have who are financially dependent on you, or on the spouse/partner who lives with you? Please include children/stepchildren not living at home with you and your spouse/partner.

○ 1 (1)

○ 2 (2)

○ 3 (3)

○ 4 or more (4)

○ No financially dependent children or no children at all (5)

Q10 How many children/stepchildren do you have who are financially dependent on you? Please include children/stepchildren not living at home with you.

○ 1 (1)

○ 2 (2)

○ 3 (3)

○ 4 or more (4)

○ No financially dependent children or no children at all (5)

Q11 Are any of your dependent children under the age of 5?

○ Yes (1)

○ No (2)

Q12 Have you moved to a new home within the last 12 months?

○ Yes (1)

○ No (2)

Q13 Was your most recent move mostly voluntary (for example, to be closer to work or school, due to a change in family status, or to improve your neighborhood), or was it mostly involuntary (for example, due to an eviction, foreclosure, rent increase or threatened action)?

○ Mostly voluntary (1)

○ Mostly involuntary (2)

Employment and income block

Q14 What is your current household income?

○ Under $25,000 (1)

○ $25,000 - $50,000 (2)

○ $50,001 - $75,000 (3)

○ $75,001 - $100,000 (4)

○ $100,001 - $150,000 (5)

○ More than $150,000 (6)

Q15 Which of the following best describes your current employment or work status?

○ Self-employed (1)

○ Work full-time for an employer or the military (2)

○ Work part-time for an employer or the military (3)

○ Work more than 30 hours a week on average for multiple employers (4)

○ Homemaker (5)

○ Full-time student (6)

○ Permanently sick, disabled, or unable to work (7)

○ Unemployed or temporarily laid off (8)

○ Retired (9)

○ Prefer not to say (10)

Display This Question:

If Q15 = Work full-time for an employer or the military

Or Q15 = Work part-time for an employer or the military

Or Q15 = Work more than 30 hours a week on average for multiple employers

Q16 Is the income associated with your primary occupation hourly or salaried?

○ Hourly (1)

○ Salaried (2)

Q17 Over the past 12 months, did your household receive any of the following types of income? Check all that apply.

☐   Salaries, wages, tips, or military pay (1)

☐   Freelance pay, such as babysitting, selling goods online, driving for a ride-sharing service, or other pick-up work (Note: do not include survey response work) (2)

☐   Payments from a pension plan (3)

☐   Withdrawals from retirement accounts (e.g., 401(k), IRA, TSP, Keogh) (4)

☐   Withdrawals from non-retirement savings accounts (5)

☐   Social Security retirement benefits (6)

☐   Other federal or state benefits (e.g., unemployment, disability, SSI, TANF) (7)

☐   Income from a business (8)

☐   Renting out property, such as your car, your place of residence, or other items you own, through websites, newspaper ads, flyers, etc. (9)

☐   Borrowing against a credit card (10)

☐   Borrowing against an asset, such as a reverse mortgage or home equity line of credit (11)

☐   Money from family members who do not live in your household (12)

☐   None of these (13)

Q18 Over the past 12 months, how predictable has your income been from month to month?

○ Very predictable (1)

○ Moderately predictable (2)

○ Somewhat unpredictable (3)

○ Very unpredictable (4)

Q19 Over the past year, how would you describe your household's income and expenses?

○ Generally spend <u>much less</u> than income (1)

○ Generally spend <u>a little less</u> than income (2)

○ Generally spend <u>about equal</u> to income (3)

○ Generally spend <u>a little more</u> than income (4)

○ Generally spend <u>much more</u> than income (5)

Q20 Over the past 12 months, which of the following statements best describes how well your household is keeping up with its bills? Please consider rent, utility, phone, and credit card bills.

○ Pay <u>all</u> bills on time (1)

○ Pay <u>most</u> bills on time (2)

○ Pay <u>some</u> bills on time (3)

○ Pay <u>very few</u> bills on time (4)

Q21 How long could your household make ends meet if you lost your main source of income and had to live off savings that are readily available to cover basic monthly expenses (such as housing, food, taxes, healthcare, etc.)? Please consider money in your checking account, savings account, on prepaid cards, and in cash.

○ 6 months or more (1)

○ At least 3 months, but less than 6 months (2)

○ At least 1 month, but less than 3 months (3)

○ At least 1 week, but less than 1 month (4)

○ Less than 1 week (5)

Q22 How confident are you that your household is taking the steps needed to ensure that you will have enough money saved for your long-term financial goals (such as buying a home, launching a business, starting a family, helping pay for education, planning for retirement, etc.)? Please consider money saved in retirement funds, stocks and bonds, other long-term savings accounts, and money not kept in a bank.

○ Very confident (1)

○ Moderately confident (2)

○ Slightly confident (3)

○ Not at all confident (4)

Q23 As of today, how would you describe your household's current level of debt? Please consider money owed on bank loans, student loans, medical debt, past-due utilities, money owed to friends and family, and any credit card balances carried over from the previous month.

○ Do <u>not have any</u> debt (1)

○ Have a <u>manageable</u> amount of debt (2)

○ Have a <u>bit too much</u> debt (3)

○ Have <u>far too much</u> debt (4)

Q24 How confident are you that your household's insurance policies will provide you with enough support in case of an emergency? Please consider the amount of coverage you have for your health insurance, vehicle insurance, home/rental insurance, life insurance and disability insurance.

○ Very confident (1)

○ Moderately confident (2)

○ Slightly confident (3)

○ Not at all confident (4)

○ I don't have any insurance (5)

Financial services block

Q25 Do you currently make use of...

	Yes (1)	No (2)
...a checking account? (1)	○	○
...a savings account? (2)	○	○
...a personal retirement account or other investment account? (3)	○	○
...a credit card? (4)	○	○
...a debit card linked to a bank account? (5)	○	○
...a prepaid card that is not linked to a bank account? (6)	○	○

Q26 Over the past 12 months, have you…

	Yes (1)	No (2)
…taken out an auto title loan? (Note: Auto title loans are loans where a car title is used to borrow money for a short period of time. They are NOT loans used to purchase an automobile.) (1)	○	○
…taken out a short term "payday" loan? (2)	○	○
…gotten a tax refund anticipation loan, or use a tax preparation service in order to receive your tax refund faster than the IRS would provide it? (3)	○	○
…used a pawn shop? (4)	○	○
…used a rent-to-own store? (5)	○	○

Events block

Q27 The following questions are for statistical purposes only.

Q28 Sometimes, households experience unexpected events. In the last 12 months, please tell us if any of the following happened to your household. Select all that apply.

☐ Someone in the household brought in less income than expected due to unemployment, a pay cut, or reduced hours (1)

☐ Someone in the household divorced, separated or was widowed from a spouse or partner (2)

☐ Someone in the household lost their health insurance (3)

☐ Someone in the household experienced a costly medical emergency (4)

☐ Someone in the household had retirement benefits at work cut substantially (including having an employer ask them to cover more of these costs) (5)

☐ The value of your investments or retirement funds decreased substantially (6)

☐ The value of your house decreased substantially (7)

☐ Someone in the household spent a substantial sum helping out your extended family (8)

☐ A major repair or replacement was needed for your home, large appliances, or vehicle (9)

☐ None of these (10)

Q29 At any time in the last 12 months, have you...

	Yes (1)	No (2)
...failed to pay a bill for several months because you couldn't afford to? (1)	○	○
...gone without health insurance because you couldn't afford it? (2)	○	○
...been hungry because you couldn't pay for food? (3)	○	○
...not gone to the doctor because of the cost? (4)	○	○
...not taken a child to the doctor because of the cost? (5)	○	○
...not filled a medical prescription because of the cost? (6)	○	○
...taken money out of your retirement savings to pay your current bills? (7)	○	○
...gotten so far into debt that you felt you could never get out? (8)	○	○
...gotten so far into debt that you had to declare bankruptcy? (9)	○	○

Q30 In the last 12 months, have you or someone in your immediate family experienced any of the following?

	Yes (1)	No (2)
Being a victim of a crime? (1)	○	○
Having problem with alcohol abuse? (2)	○	○
Having problem with drug abuse? (3)	○	○
Experiencing physical abuse by a family member? (4)	○	○

Q31 In the past week, have you felt...

	Yes (1)	No (2)
...like you didn't want to eat; that your appetite was poor? (1)	○	○
...bothered by things that usually don't bother you? (2)	○	○
...like everything you did was an effort? (3)	○	○
...that you could not shake off the blues, even with help from family or friends? (4)	○	○
...that your sleep was restless? (5)	○	○

Q32 Hard times are sometimes made easier knowing you can get help in a time of need. If you were to experience economic hardship, how confident are you that...

	Not at all confident (1)	Slightly confident (2)	Moderately confident (3)	Very confident (4)
...another adult in your household could get additional work to bring in more money? (1)	○	○	○	○
...you could move into a friend's or family member's home to reduce housing expenses? (2)	○	○	○	○
...you could borrow money from a close friend or relative? (3)	○	○	○	○
...if other family members needed financial support, you could share that cost with other relatives? (4)	○	○	○	○
...if retirement proved more expensive than you could afford, you could move in with family or friends as you got older? (5)	○	○	○	○

Care and transportation block

Q33 Do you have access to a reliable mode of transportation? Select all that apply:

☐　Yes, I own a vehicle (1)

☐　Yes, I lease a vehicle (2)

☐　Yes, I borrow or share a vehicle (3)

☐　Yes, I use public transportation (4)

☐　Yes; I bicycle or walk (5)

☐　⊗No reliable access (6)

Q34 Do you have health insurance?

○ Yes (1)

○ No (2)

Q35 Are you currently covered by any of the following types of health insurance or health coverage plans? Select all that apply:

☐ Insurance through a current or former employer or union (mine or that of a family member) (1)

☐ Insurance purchased directly from an insurance company (by myself or by a family member) (2)

☐ Medicare, for people 65 or older, or people with certain disabilities (3)

☐ Medicaid, BadgerCare, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability (4)

☐ TRICARE or other military health care (5)

☐ VA (either past or present enrollment or use of VA health care) (6)

☐ Indian Health Service (7)

☐ Other: (8) _____

Q36 What arrangement do you use primarily for childcare?

○ My child goes to a child care center (1)

○ My child goes to a family childcare provider whose business provides care for children in their home. (2)

○ Someone who is related to me takes care of my child in my home. (3)

○ Someone who is related to me takes care of my child in their home. (4)

○ Someone who is not related to me cares for my child in my home. (5)

○ Someone who is not related to me cares for my child in their home. (6)

○ I care for my child in my home. (7)

Current financial standing block

Q37 Compared to 12 months ago, would you say that you are better off, the same, or worse off financially?

○ Better off (1)

○ The same (2)

○ Worse off (3)

Q38 Thank you very much for taking our survey!

Q39 Is there anything about this survey you would like to tell us? This question is not required.

_____

_____

_____

_____

_____

Appendix 3: Resources

- Landing page for AmFam interactive survey explorer and interactive map of financial insecurity in Wisconsin: https://insecurity-survey-wi.amfamlabs.com/
- Raw survey result data: https://insecurity-survey-wi.amfamlabs.com/wi_poverty_survey_for_public_export_4091_with_theta.csv