



HUMAN NEEDS INDEX

A timely, multidimensional view of
poverty-related need

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NOTE: Minor changes in all the yearly values were reported in the update issued in April 2016 because the researchers slightly refined the statistical model to include more frequently updated population values. This is a one-time change.

Executive Summary

In this report, we introduce the Human Needs Index (HNI), the statistically-tested and validated instrument measuring seven indicators of need. This index affords a unique opportunity to address the call for increasingly timely, accessible, and rigorous data from nonprofit organizations, like The Salvation Army, to better illuminate trends in poverty over time. The HNI scores are predicated on monthly data that are finalized at the conclusion of each quarter—an important distinction that differentiates the HNI from other measures of poverty-related need. These “real time” data allow the HNI to emerge as a valuable tool and an important complement to existing poverty and vulnerability indicators. The HNI has been shown to be strongly correlated with governmental poverty-related measures, rising most sharply with increases in the Supplemental Nutrition Assistance Program (SNAP) benefit and steadily with the U.S. unemployment rate.

This report provides an overview of the key trends of human need across the U.S., drawing on quantitative analysis of Salvation Army organizational service data. In this report we examine the mechanisms through which individuals and communities in poverty can be identified and targeted. The report also examines the dynamic aspects of need and vulnerability across time and location. The findings reveal chronic widespread national need, as well as, acute geographically-restricted regional need, and concur with prior claims that government safety net services, in isolation, may not be adequate in serving individuals, families, and communities in need.

Key Findings

The acute sensitivity to change in need is an important element of the HNI—a strength that sets it apart from other measures of poverty-related need that are unable to capture these variations either so immediately or so specifically.

National Human Needs Index (HNI)

- **The national HNI mirrors overall economic trends over time.**

The national HNI score was lowest in 2004, which indicates that poverty-related need was relatively low during this period. At the start of the Great Recession, in 2008, the HNI score began a gradual increase, and climbed to its highest peak in 2012. In the past year, HNI scores have begun to decline, reflecting an overall decrease poverty-related need.

- **The economic volatility experienced in the U.S. during the Great Recession was reflected in the national HNI score.**

The Great Recession exerted a powerful impact on unemployment rates, personal income, and wealth, as well as the housing market in the U.S. The national HNI scores reflect this reduced economic activity as demonstrated by the lowest HNI scores occurring during the pre-Great Recession period (2004-2007), moderate scores appearing in the midst of the Great Recession (2008-2009), and the highest scores represented during the immediate post-Great Recession era (2010-2013).

- **The effects of natural disasters are captured in the national HNI score.**

Although natural disaster events are geographically specific, their impact is reflected in the national HNI score. The elevation of specific poverty-related indicators are associated with services provided during natural disasters, therefore affecting the fluctuation of national HNI scores. Specifically, the impact of Super Tuesday Tornado Outbreak in February 2008 and Hurricane Sandy in October 2012 are reflected in national the national HNI score.

- **Seasonality may be an important factor in anticipating human need and is mirrored in the national HNI score.**

In program/fiscal year 2014, HNI scores began to climb in November 2013. December 2013 is markedly the highest score during the 2014 program and fiscal year. Scores began to decrease in January 2014 and February 2014, which represents the lowest score during the same program and fiscal year. While the scores are specific to the most recent program year, the overall trend across years (and regions) illustrates poverty-related need increases late in the calendar year. This increase in need at the end of the year is further demonstrated by the rise in the use of the Supplemental Nutrition Assistance Program (SNAP) benefit; while unmet need is also prominent as evidenced by the Salvation Army's referral data.

Regional Models of the HNI

The Salvation Army's regional service areas are divided into four segments: Central, East, South, and West. While the national Human Needs Index (HNI) scores are valuable to understanding overall poverty-related need and in measuring the effectiveness of response to that need in the United States as a whole, regional HNI scores may be more useful in understanding trends that are specific to a geographic area.

➤ Central Region HNI Scores, by Year (2004-2014)

Central Region HNI scores remained fairly constant from 2004 to 2008 but increased sharply in 2009 and achieved the highest level in 2010. After 2010, the HNI scores began to decline slowly but remained higher than the pre-recession era. The trend for Central region's HNI scores over time is comparable to the national HNI scores, and likely for similar reasons. While the Central region includes a few states impacted by the 2008 Super Tuesday Tornado, post-2008 HNI score variation might characterize the effects of both that natural disaster and the Great Recession. Likewise, seasonal effects on Central region HNI scores are similar to the trends at the national level.

➤ Eastern Region HNI Scores, by Year (2004-2014)

In the Eastern region, HNI scores stayed relatively constant between 2004 and 2008. After 2008, these scores rose until 2013. The year 2014 represents a potential return to pre-recession levels. The Eastern region's HNI scores over time correspond with the national HNI scores, and in part, for similar reasons to the Central region's HNI scores. The Eastern region experienced two major natural disasters (Lake Storm "Aphid in October 2006 and Hurricane Sandy in October 2012) during this decade leading to corresponding changes in the HNI. The effects of the Great Recession were reflected in the Eastern region HNI scores after 2008. Moreover, seasonal effects on Eastern region HNI scores are comparable to the trends at the national level.

➤ Southern Region HNI Scores, by Year (2004-2014)

Perhaps the most volatile of all regions, the Southern region's HNI scores display great variability over time. Reflecting Hurricane Katrina and other large-scale regional disasters, the index increased in 2006 and in 2012. The index then declined after 2012. The effects of the Great Recession appeared to be less pronounced in the Southern region, perhaps due to the abundance of natural disasters during this same time. The Southern region's HNI remained fairly stable during 2007 and 2008 with only a modest increase in 2009. Finally, seasonal effects on Southern region HNI scores are also similar to the trends at the national level.

➤ Western Region HNI Scores, by Year (2004-2014)

While other regions' HNI scores were highly variable during the years prior to the Great Recession, the Western region HNI scores increased dramatically yet consistently during this

timeframe. Although natural disasters, like wildfires, affected the Western U.S. for ongoing periods of time during 2004-2014, and therefore influenced the demand for acute assistance, the Western region witnessed more dramatic growth than any other region in HNI indicator scores after 2008. These scores reflect, perhaps, the more intense and far-reaching impact of the Great Recession on the Western U.S. The Western region's HNI scores trend may imply that the West experienced both the immediate and long-term impact of the Great Recession much more intensely than any of the other regions—perhaps due in part to the financial distress experienced from extensive job loss as well as the dramatic fluctuation in the housing market, including the substantial number of households that lost their primary residences due to foreclosure during this time, in this region. Seasonal effects on Western region HNI scores are also similar to the trends at the national level.

The Human Needs Index (HNI) Methodology

The most recent statistics show that nearly 16 percent of Americans, or about 48.8 million people, live below the government-defined poverty line. For many decades, policymakers, practitioners and nonprofit leaders have sought accurate and timely data to measure poverty, economic well-being, and vulnerability. And, greater emphasis is being placed on the numbers today, as data play a critical role in decision-making for organizations across sectors. However, very little is known about conditions facing the hungry, the homeless, or the unemployed, as income alone may not be an adequate measure of poverty.

Today, nonprofit agencies have become vital partners in poverty reduction. Yet, while the efforts of nonprofit organizations in providing for basic human needs are well-known, data quantifying these effects and measuring the impact of nonprofit organizations in combating poverty have neither been in the public domain nor been used widely to inform policy debates on poverty. The Salvation Army, in particular, has played a critical and expanding role in improving the well-being of individuals and local communities. In fact, thousands of nonprofit organizations throughout the United States, including the Salvation Army, constitute the safety net of services addressing basic human needs.

The HNI provides a timely census of need in different locations using indicators that represent features of well-being that may not be captured by traditional measures of need-based poverty. The HNI, instead, reflects need substantiated on consumption and not income, which may denote more extreme deprivation at local levels. The advantage of this type of measurement is that it offers critical observations informing the work of nonprofit organizations and public policymakers working to reduce poverty.

The HNI aims to answer the following question:

What are the patterns of human need in the United States across time and regions?

In constructing the HNI, four key components were identified that, taken together, allow us to measure dimensions of human need in a given geographic area:

- Food Security
- Clothing Assistance
- Health/Well-being Services
- Housing/Shelter Assistance

Human Needs Index Indicators:

HNI Indicator	HNI Indicator Description
Meals Provided	All meals provided whether purchased from another source or served through a Salvation Army facility.
Grocery Orders	Groceries provided by voucher or distributed through a food pantry or food bank.
Housing Orders	The number of rent/mortgage assistance payments to establish and/or maintain an individual/family in their own home.
Clothing Orders	The number of clothing orders provided.
Furniture Orders	The number of furniture orders provided.
Medical Orders	The number of medical orders provided (i.e. prescriptions) and the number of volunteers/hours served.
Energy Orders	The number of energy assistance orders provided and the number of volunteers/hours served.

Systemic Factors Affecting Capacity

An important aspect of the HNI is that it measures the need for services and not the capacity to provide services. There are many factors that affect the capacity (supply) of resources required to provide services to those in need—and there are also many elements impacting the fluctuation in need (demand) for acquiring these services. Whenever there is a change in the factors of supply or demand, market equilibrium will be affected. In order to understand real demand, and therefore true need, detailed information on the scale and impact of the supply and demand factor changes is warranted.

The overall economic climate influences the availability and the capacity of the Salvation Army’s human and financial resources, as well as the financial resources of local, state, and

federal governments that financially support the Salvation Army (and other nonprofit human service organizations) and associated resources and services. While human service organizations received only 12.4 percent of all charitable contributions in 2013 (a 4.0 percent 34 increase from 2008), nearly one-third (32.3 percent) of nonprofit revenues were provided by government funding in 2012. However, only 10 percent of the Salvation Army's financial support comes from government sources, which suggests that increases and decreases in this funding would likely only minimally impact changes in the organization's capacity to provide assistance to those in need. Therefore, variations in HNI scores reflect changes in the demand for services and not the supply of services.

Conclusion

The goal of this project was to use the Salvation Army's rich collection of service data to expand the pathways through which individuals and communities in poverty are identified and targeted so that immediate and long-term solutions to improve these conditions can be implemented. To achieve this aim, the HNI's seven indicator variables—*Meals Provided, Grocery Orders, Housing Orders, Clothing Orders, Furniture Orders, Medical Orders, and Energy Orders*—aggregated from the site level to state, regional, and national levels were statistically tested and validated to ensure scientific rigor. The result is a comprehensive measure/score of need that can track changes in need-based demand, and that will be updated quarterly—two of the advantages that set the HNI apart from other measures of poverty-related need, which are unable to identify these variations either with such specificity or immediacy.

While governmental measures of poverty are useful, they are reported with a substantial lag. The real-time assessment of specific poverty-related need at the local and national levels is important for nonprofit organizations, like the Salvation Army, to effectively provide for those demanding assistance. This index not only elicits the breadth and depth of predominant factors affecting provisional need but it also tracks the evolution of human need over time and within specific communities. Understanding the distinctive ways in which human need changes in specific locales and at particular times may inform public policy and address poverty-related human need and policy reform in a more deliberate, meaningful, and successful manner.

In the future we envision further disaggregating data so that the HNI can be used to measure increasingly more specific local levels (counties, metropolitan statistical areas, etc.) of specific need like energy and housing, as well as unmet need. To ensure its ongoing relevance and accuracy, the HNI will continue to be validated with external governmental data. Over time the HNI may also provide important insights highlighting the links between changes in poverty-related need and trends in governmental services associated with healthcare (such as the Affordable Care Act, for example), food insecurity, and housing policies. Finally, perhaps the HNI's greatest contribution to the field is that it uses objective nonprofit organizational data to measure poverty-related need—therefore advancing the mechanisms to combat poverty from anecdotal notions to evidence-based solutions.