

National Risk Index

March 27, 2025

Census tract 48285000200, Lavaca County, Texas

Summary

Risk Index is **Very High**



Expected Annual Loss is **Relatively High**



Social Vulnerability is **Very High**



Community Resilience is **Relatively Moderate**

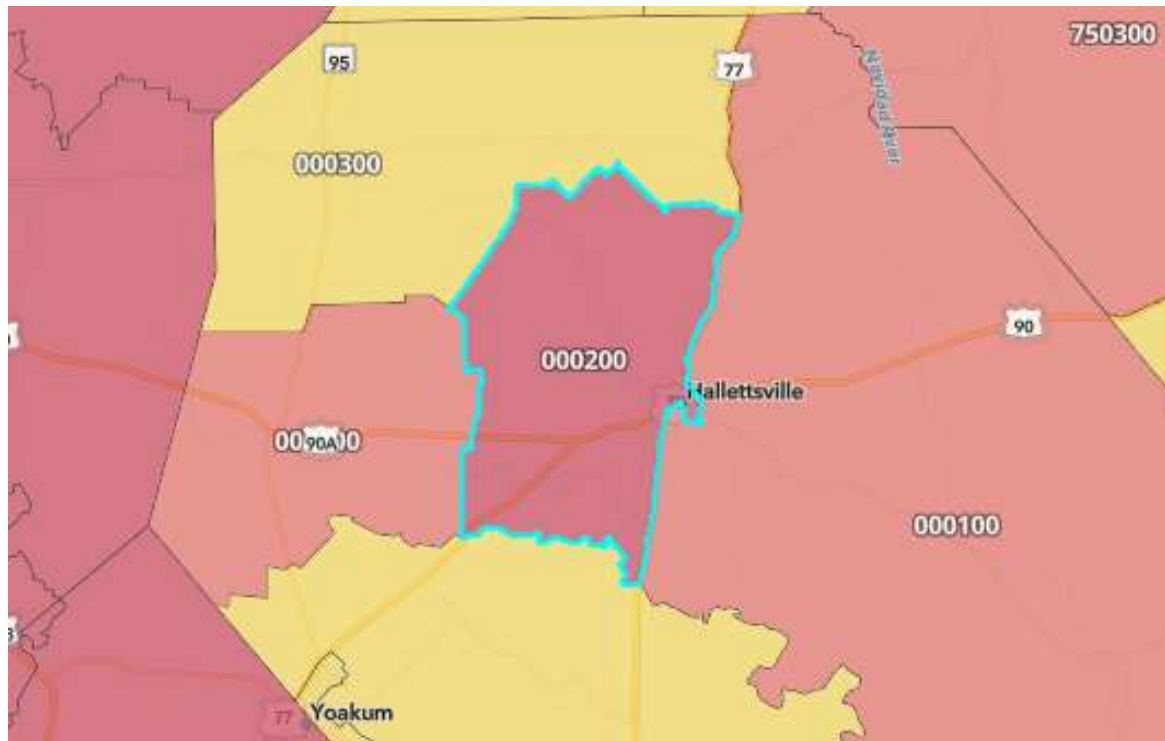


While reviewing this report, keep in mind that low risk is driven by lower loss due to natural hazards, lower social vulnerability, and higher community resilience.

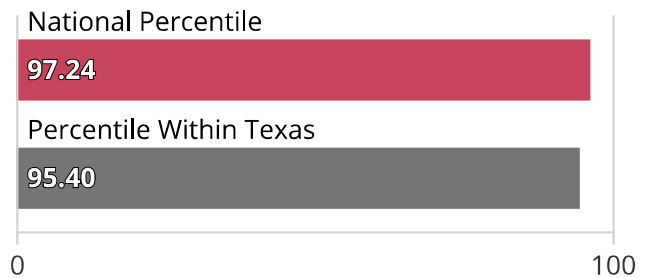
For more information about the National Risk Index, its data, and how to interpret the information it provides, please review the **About the National Risk Index** and **How to Take Action** sections at the end of this report. Or, visit the National Risk Index website at hazards.fema.gov/nri/learn-more to access supporting documentation and links.

Risk Index

The Risk Index rating is **Very High** for **Census tract 48285000200** when compared to the rest of the U.S.



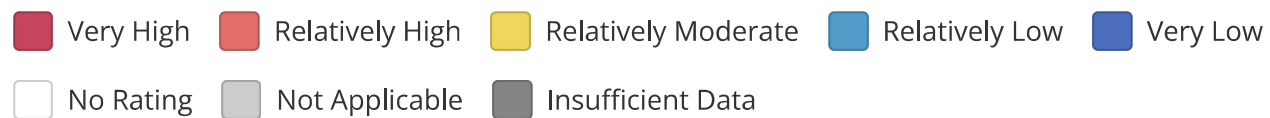
Score **97.24**



97% of U.S. Census tracts have a lower Risk Index

95% of Census tracts in Texas have a lower Risk Index

Risk Index Legend



Hazard Type Risk Index

Hazard type Risk Index scores are calculated using data for only a single hazard type, and reflect a community's Expected Annual Loss value, community risk factors, and the adjustment factor used to calculate the risk value.

Hazard Type	Risk Index Rating	Risk Index Score	National Percentile
Avalanche	Not Applicable	--	
Coastal Flooding	Not Applicable	--	
Cold Wave	Relatively Moderate	75.8	0100
Drought	Very Low	80.7	0100
Earthquake	Very Low	17.3	0100
Hail	Relatively Low	69.6	0100
Heat Wave	No Rating	0	0100
Hurricane	Relatively High	89.2	0100
Ice Storm	Relatively Moderate	72.4	0100
Landslide	Relatively High	95.7	0100
Lightning	Very High	94.2	0100
Riverine Flooding	Very High	99.7	0100
Strong Wind	Relatively High	85.4	0100

Hazard Type	Risk Index Rating	Risk Index Score	National Percentile	
Tornado	Relatively High	85.5	0	100
Tsunami	Not Applicable	--		
Volcanic Activity	Not Applicable	--		
Wildfire	Relatively Low	84.9	0	100
Winter Weather	Relatively Moderate	84.1	0	100

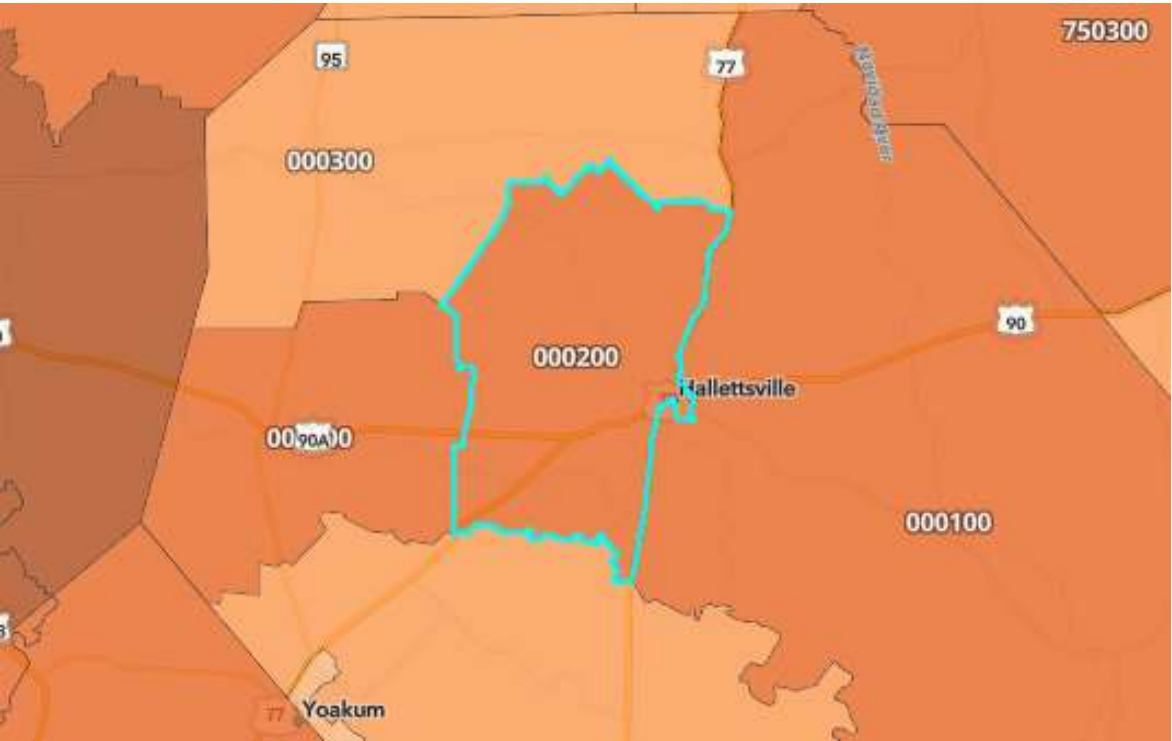
Risk Factor Breakdown

Hazard Type	EAL Value	Social Vulnerability	Community Resilience	CRF	Risk Value	Risk Index Score
Riverine Flooding	\$2,290,395	Very High	Relatively Moderate	1.43	\$3,282,912	99.7
Hurricane	\$730,097	Very High	Relatively Moderate	1.43	\$1,046,476	89.2
Tornado	\$205,877	Very High	Relatively Moderate	1.43	\$295,091	85.5
Strong Wind	\$37,822	Very High	Relatively Moderate	1.43	\$54,212	85.4
Lightning	\$25,610	Very High	Relatively Moderate	1.43	\$36,707	94.2
Wildfire	\$8,778	Very High	Relatively Moderate	1.43	\$12,582	84.9
Landslide	\$6,711	Very High	Relatively Moderate	1.43	\$9,620	95.7
Cold Wave	\$6,491	Very High	Relatively Moderate	1.43	\$9,304	75.8
Winter Weather	\$6,316	Very High	Relatively Moderate	1.43	\$9,052	84.1
Hail	\$5,626	Very High	Relatively Moderate	1.43	\$8,063	69.6
Ice Storm	\$5,255	Very High	Relatively Moderate	1.43	\$7,532	72.4
Earthquake	\$1,594	Very High	Relatively Moderate	1.43	\$2,285	17.3
Drought	\$284	Very High	Relatively Moderate	1.43	\$407	80.7
Heat Wave	\$0	Very High	Relatively Moderate	1.43	\$0	0

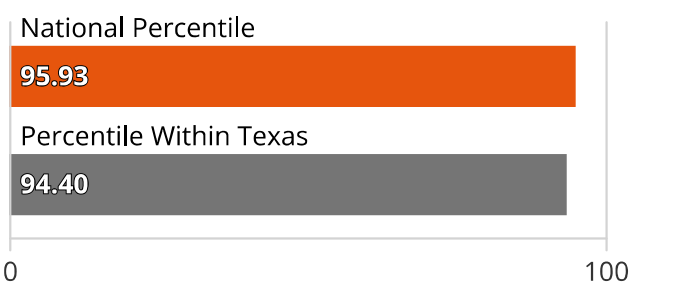
Hazard Type	EAL Value	Social Vulnerability	Community Resilience	CRF	Risk Value	Risk Index Score
Avalanche	--	Very High	Relatively Moderate	1.43	--	--
Coastal Flooding	--	Very High	Relatively Moderate	1.43	--	--
Tsunami	--	Very High	Relatively Moderate	1.43	--	--
Volcanic Activity	--	Very High	Relatively Moderate	1.43	--	--

Expected Annual Loss

In **Census tract 48285000200**, expected loss each year due to natural hazards is **Relatively High** when compared to the rest of the U.S.



Score **95.93**



96% of U.S. Census tracts have a lower Expected Annual Loss

94% of Census tracts in Texas have a lower Expected Annual Loss

Expected Annual Loss Legend

- Very High
- Relatively High
- Relatively Moderate
- Relatively Low
- Very Low
- No Expected Annual Losses
- Not Applicable
- Insufficient Data

Composite Expected Annual Loss

\$3,330,855.39

Composite Expected Annual Loss Rate National Percentile		93.2	
Building EAL	\$1,132,623.56	Population EAL	0.19 fatalities
Building EAL Rate	\$1 per \$866.52 of building value	Population EAL Rate	1 per 19.65K people
Agriculture EAL	\$34,323.84	Population Equivalence EAL	\$2,163,907.99
Agriculture EAL Rate	\$1 per \$169.43 of agriculture value		

Expected Annual Loss for Hazard Types

Expected Annual Loss scores for hazard types are calculated using data for only a single hazard type, and reflect a community's relative expected annual loss for only that hazard type.

14 of 18 hazard types contribute to the expected annual loss for **Census tract 48285000200**.

Hazard Type	Expected Annual Loss Rating	EAL Value	Score
Riverine Flooding	Very High	\$2,290,395	99.6
Hurricane	Relatively High	\$730,097	86.6
Tornado	Relatively High	\$205,877	79.3
Strong Wind	Relatively Moderate	\$37,822	81.3
Lightning	Relatively High	\$25,610	91.5
Wildfire	Relatively Low	\$8,778	83.7

Hazard Type	Expected Annual Loss Rating	EAL Value	Score
Landslide	Relatively High	\$6,712	94.1
Cold Wave	Relatively Moderate	\$6,491	72.5
Winter Weather	Relatively Moderate	\$6,316	80.4
Hail	Relatively Low	\$5,626	67.2
Ice Storm	Relatively Low	\$5,255	67.5
Earthquake	Very Low	\$1,594	13.5
Drought	Very Low	\$284	80.1
Heat Wave	No Expected Annual Losses	\$0	0.0
Avalanche	Not Applicable	--	--
Coastal Flooding	Not Applicable	--	--
Tsunami	Not Applicable	--	--
Volcanic Activity	Not Applicable	--	--

Expected Annual Loss Values

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Avalanche	--	--	--	--	--
Coastal Flooding	--	--	--	--	--

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Cold Wave	\$6,491	\$170	\$3,883	0.00	\$2,438
Drought	\$284	n/a	n/a	n/a	\$284
Earthquake	\$1,594	\$1,300	\$295	0.00	n/a
Hail	\$5,626	\$3,444	\$2,145	0.00	\$37
Heat Wave	\$0	\$0	\$0	0.00	\$0
Hurricane	\$730,097	\$704,586	\$6,407	0.00	\$19,105
Ice Storm	\$5,255	\$2,864	\$2,391	0.00	n/a
Landslide	\$6,711	\$916	\$5,795	0.00	n/a
Lightning	\$25,610	\$987	\$24,623	0.00	n/a
Riverine Flooding	\$2,290,395	\$296,023	\$1,982,224	0.17	\$12,147
Strong Wind	\$37,822	\$32,217	\$5,378	0.00	\$226
Tornado	\$205,877	\$79,504	\$126,296	0.01	\$77
Tsunami	--	--	--	--	--
Volcanic Activity	--	--	--	--	--
Wildfire	\$8,778	\$8,744	\$34	0.00	\$0
Winter Weather	\$6,316	\$1,868	\$4,438	0.00	\$10

Exposure Values

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Avalanche	--	--	--	--	--
Coastal Flooding	--	--	--	--	--
Cold Wave	\$43,501,251,246	\$981,435,847	\$42,514,000,000	3,665.00	\$5,815,399
Drought	\$56,083	n/a	n/a	n/a	\$56,083
Earthquake	\$43,495,422,000	\$981,422,000	\$42,514,000,000	3,665.00	n/a
Hail	\$43,501,251,246	\$981,435,847	\$42,514,000,000	3,665.00	\$5,815,399
Heat Wave	\$0	\$0	\$0	0.00	\$0
Hurricane	\$43,501,251,246	\$981,435,847	\$42,514,000,000	3,665.00	\$5,815,399
Ice Storm	\$43,495,435,847	\$981,435,847	\$42,514,000,000	3,665.00	n/a
Landslide	\$1,177,359,819	\$18,326,394	\$1,159,033,425	99.92	n/a
Lightning	\$43,495,435,847	\$981,435,847	\$42,514,000,000	3,665.00	n/a
Riverine Flooding	\$6,293,502,508	\$147,447,036	\$6,145,191,359	529.76	\$864,114
Strong Wind	\$43,501,251,246	\$981,435,847	\$42,514,000,000	3,665.00	\$5,815,399
Tornado	\$43,501,251,246	\$981,435,847	\$42,514,000,000	3,665.00	\$5,815,399
Tsunami	--	--	--	--	--

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Volcanic Activity	--	--	--	--	--
Wildfire	\$2,156,388,681	\$53,262,181	\$2,102,652,221	181.26	\$474,279
Winter Weather	\$43,501,251,246	\$981,435,847	\$42,514,000,000	3,665.00	\$5,815,399

Annualized Frequency Values

Hazard Type	Annualized Frequency	Events on Record	Period of Record
Avalanche	--	--	--
Coastal Flooding	--	--	--
Cold Wave	0.1 events per year	2	2005-2021 (16 years)
Drought	39.1 events per year	861	2000-2021 (22 years)
Earthquake	0.009% chance per year	n/a	2021 dataset
Hail	1.9 events per year	66	1986-2021 (34 years)
Heat Wave	0 events per year	0	2005-2021 (16 years)
Hurricane	0.1 events per year	8	East 1851-2021 (171 years) / West 1949-2021 (73 years)
Ice Storm	0.4 events per year	29	1946-2014 (67 years)
Landslide	0 events per year	0	2010-2021 (12 years)
Lightning	85.3 events per year	1,877	1991-2012 (22 years)

Hazard Type	Annualized Frequency	Events on Record	Period of Record
Riverine Flooding	4.1 events per year	98	1996-2019 (24 years)
Strong Wind	1 event per year	35	1986-2021 (34 years)
Tornado	0 events per year	4	1950-2021 (72 years)
Tsunami	--	--	--
Volcanic Activity	--	--	--
Wildfire	0.039% chance per year	n/a	2021 dataset
Winter Weather	0.4 events per year	7	2005-2021 (16 years)

Historic Loss Ratios

Hazard Type	Overall Rating
Avalanche	--
Coastal Flooding	--
Cold Wave	Relatively Low
Drought	Relatively Low
Earthquake	Very Low
Hail	Relatively Low
Heat Wave	No Rating

Hazard Type	Overall Rating
Hurricane	Relatively High
Ice Storm	Relatively Low
Landslide	Relatively High
Lightning	Relatively Moderate
Riverine Flooding	Relatively Moderate
Strong Wind	Relatively High
Tornado	Very Low
Tsunami	--
Volcanic Activity	--
Wildfire	Relatively Moderate
Winter Weather	Relatively High

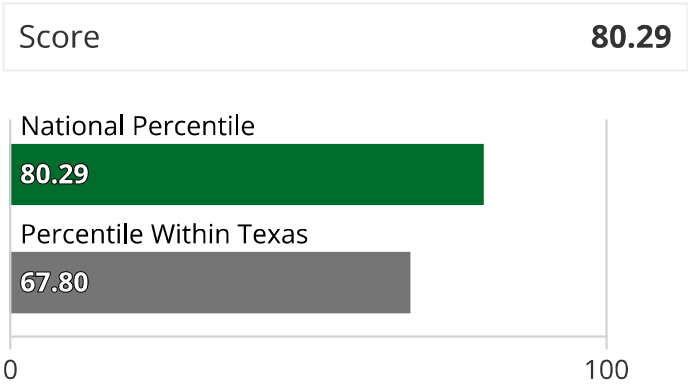
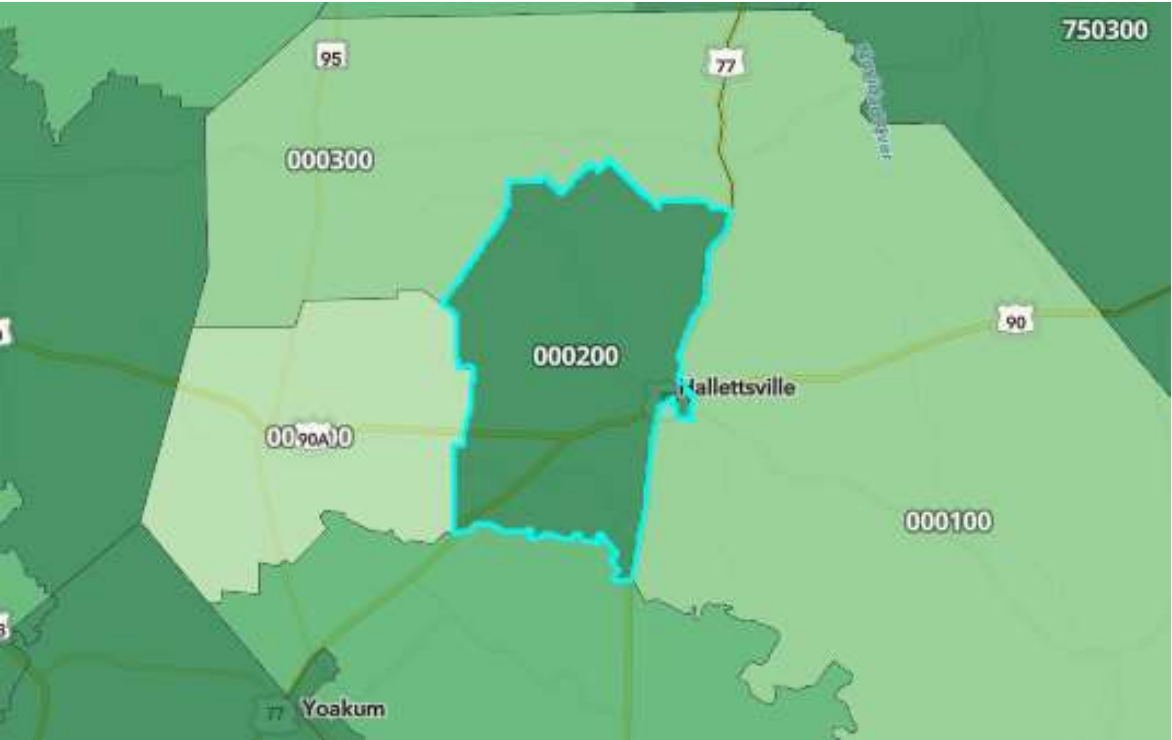
Expected Annual Loss Rate

Hazard Type	Building EAL Rate (per building value)	Population EAL Rate (per population)	Agriculture EAL Rate (per agriculture value)
Avalanche	--	--	--
Coastal Flooding	--	--	--

Hazard Type	Building EAL Rate (per building value)	Population EAL Rate (per population)	Agriculture EAL Rate (per agriculture value)
Cold Wave	\$1 per \$5.76M	1 per 10.95M	\$1 per \$2.39K
Drought	--	--	\$1 per \$20.49K
Earthquake	\$1 per \$755.24K	1 per 144.33M	--
Hail	\$1 per \$284.96K	1 per 19.82M	\$1 per \$157.56K
Heat Wave	--	--	--
Hurricane	\$1 per \$1.39K	1 per 6.64M	\$1 per \$304.40
Ice Storm	\$1 per \$342.71K	1 per 17.78M	--
Landslide	\$1 per \$1.07M	1 per 7.34M	--
Lightning	\$1 per \$994.43K	1 per 1.73M	--
Riverine Flooding	\$1 per \$3.32K	1 per 21.45K	\$1 per \$478.74
Strong Wind	\$1 per \$30.46K	1 per 7.90M	\$1 per \$25.71K
Tornado	\$1 per \$12.34K	1 per 336.62K	\$1 per \$75.64K
Tsunami	--	--	--
Volcanic Activity	--	--	--
Wildfire	\$1 per \$112.24K	1 per 1.25B	\$1 per \$18.52M
Winter Weather	\$1 per \$525.40K	1 per 9.58M	\$1 per \$579.79K

Social Vulnerability

Social groups in **Census tract 48285000200** have a **Very High** susceptibility to the adverse impacts of natural hazards when compared to the rest of the U.S.



80% of U.S. Census tracts have a lower Social Vulnerability

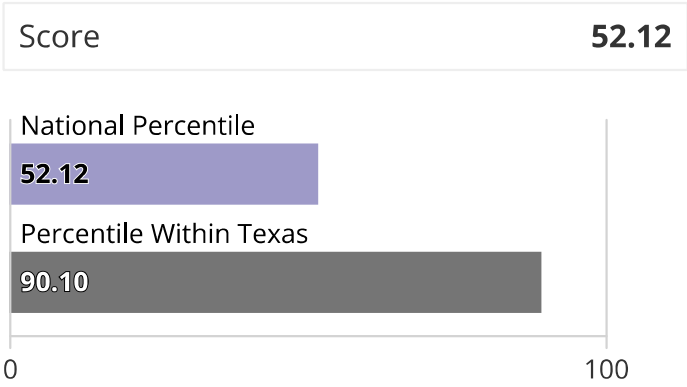
68% of Census tracts in Texas have a lower Social Vulnerability

Social Vulnerability Legend

- Very High
- Relatively High
- Relatively Moderate
- Relatively Low
- Very Low
- Data Unavailable

Community Resilience

Communities in **Census tract 48285000200** have a **Relatively Moderate** ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.



48% of U.S. Census tracts have a higher Community Resilience

10% of Census tracts in Texas have a higher Community Resilience

Community Resilience Legend

- Very High
- Relatively High
- Relatively Moderate
- Relatively Low
- Very Low
- Data Unavailable

About the National Risk Index

The National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather.

The National Risk Index leverages available source data for Expected Annual Loss due to these 18 hazard types, Social Vulnerability, and Community Resilience to develop a baseline relative risk measurement for each United States county and Census tract. These measurements are calculated using average past conditions, but they cannot be used to predict future outcomes for a community. The National Risk Index is intended to fill gaps in available data and analyses to better inform federal, state, local, tribal, and territorial decision makers as they develop risk reduction strategies.

Explore the National Risk Index Map at hazards.fema.gov/nri/map.

Visit the National Risk Index website at hazards.fema.gov/nri/learn-more to access supporting documentation and links.

Calculating the Risk Index

Risk Index values are calculated using an equation* that combines values for Expected Annual Loss (EAL) due to natural hazards, with the Community Risk Factor (CRF), which is a function of Social Vulnerability and Community Resilience:

Risk Index = **Expected Annual Loss** × Community Risk Factor

where Community Risk Factor = $f\left(\frac{\text{Social Vulnerability}}{\text{Community Resilience}}\right)$

*County-level risk values are derived by summing the risk values of all Census tracts within that county.

Risk is presented as a composite value and score for all 18 hazard types, as well as individual values and scores for each hazard type.

For more information, visit hazards.fema.gov/nri/determining-risk.

Calculating Expected Annual Loss

Expected Annual Loss values are calculated using an equation* that combines values for exposure, annualized frequency, and historic loss ratios for 18 hazard types:

Expected Annual Loss = **Exposure** × **Annualized Frequency** × **Historic Loss Ratio**

*Excluding Avalanche, Drought, Earthquake, and Tornado, EAL values for each hazard are calculated at the Census block level and summed together to determine Census tract and county-level hazard type EAL values.

Expected Annual Loss is presented as a composite value and score for all 18 hazard types, as well as individual values and scores for each hazard type.

For more information, visit hazards.fema.gov/nri/expected-annual-loss.

Calculating Social Vulnerability

Social Vulnerability is measured using the Social Vulnerability Index (SVI) published by the Centers for Disease Control and Prevention (CDC).

For more information, visit hazards.fema.gov/nri/social-vulnerability.

Calculating Community Resilience

Community Resilience is measured at the County level using the Baseline Resilience Indicators for Communities (HVRI BRIC) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI).

For more information, visit hazards.fema.gov/nri/community-resilience.

Values, Scores, and Ratings

The National Risk Index provides three different types of results for Risk and each component used to derive Risk: EAL, Social Vulnerability, and Community Resilience:

Values. Values for Risk and EAL are in units of dollars, representing the community's average economic loss from natural hazards each year. For Social Vulnerability and Community Resilience, values are the index values for the community provided by the source data sets.

Scores. Scores represent the national percentile ranking of the community's component value compared to all other communities at the same level (county or Census tract).

Ratings. Ratings refer to the qualitative terms that describe the relative risk of an area within the same geographic level. These rating categories range from “Very Low” to “Very High”. Ratings for Social Vulnerability and Community Resilience are based on quintiles of those components’ scores, while Risk and EAL ratings are based on more advanced statistical calculations on values . As a result, there is no fixed range of scores or values that correspond to the rating categories.

How to Take Action

There are many ways to reduce natural hazard risk through mitigation. Communities with high National Risk Index scores can take action to reduce risk by decreasing Expected Annual Loss due to natural hazards, decreasing Social Vulnerability, and increasing Community Resilience.

For information about how to take action and reduce your risk, visit hazards.fema.gov/nri/take-action.

Disclaimer

The National Risk Index (the Risk Index or the Index) and its associated data are meant for planning purposes only. This tool was created for broad nationwide comparisons and is not a substitute for localized risk assessment analysis. Nationwide datasets used as inputs for the National Risk Index are, in many cases, not as accurate as available local data. Users with access to local data for each National Risk Index risk factor should consider substituting the Risk Index data with local data to recalculate a more accurate risk index. If you decide to download the National Risk Index data and substitute it with local data, you assume responsibility for the accuracy of the data and any resulting data index. Please visit the [Contact Us](#) page if you would like to discuss this process further.

The methodology used by the National Risk Index has been reviewed by subject matter experts in the fields of natural hazard risk research, risk analysis, mitigation planning, and emergency management. The processing methods used to create the National Risk Index have produced results similar to those from other natural hazard risk analyses conducted on a smaller scale. The breadth and combination of geographic information systems (GIS) and data processing techniques leveraged by the National Risk Index enable it to incorporate multiple hazard types and risk factors, manage its nationwide scope, and capture what might have been missed using other methods.

The National Risk Index does not consider the intricate economic and physical interdependencies that exist across geographic regions. Keep in mind that hazard impacts in surrounding counties or Census tracts can cause indirect losses in your community regardless of your community's risk profile.

Nationwide data available for some risk factors are rudimentary at this time. The risk profiles for the vast majority of hazard types are based on historical frequency and loss data. They represent risk and expected annual loss based on average past conditions, not future predictions. The National Risk Index will be continuously updated as new data become available and improved methodologies are identified.

For comprehensive details about how the Risk Index can help you and its limitations, see the [National Risk Index Technical Documentation](#)

Assumption of Risk

In view of the identified limitations of the National Risk Index associated data, by using the data, you acknowledge and agree that FEMA makes no representations or warranties about the accuracy, completeness, or fitness for any particular purpose of the data; that the data is provided “as is” without warranty of any kind; that you assume full responsibility for any consequences that may arise, including financial losses, legal disputes, or other adverse outcomes; and that you release FEMA and the federal government from any liability that may arise to the extent allowable by law.

Attribution, No Endorsement

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The National Risk Index Contact Us page is available at hazards.fema.gov/nri/contact-us.