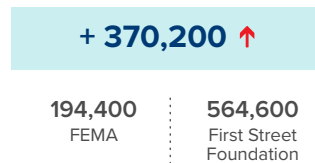




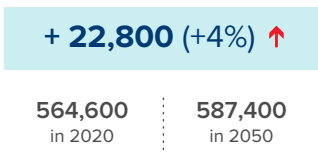
CONSIDERABLE GAPS IN FLOOD RISK REVEALED

- New research shows 370,200 additional Pennsylvania homes are at substantial risk of flooding
- Properties in Philadelphia are vulnerable to flood damage from riverine flooding, high tide, storm surges, and tropical storms or hurricanes
- Inland flooding threatens Pennsylvania homeowners with heavy rains associated with winter snowmelt and spring storms
- Poor drainage due to urbanization leaves many areas of the state susceptible to flooding from heavy rainfall
- Over the next 30 years there will be a 4% growth in the number of Pennsylvania properties at substantial risk of flood

Current Properties at Risk
Difference in number of properties currently at substantial risk¹



Properties at Risk by 2050
Total number of properties at substantial risk²

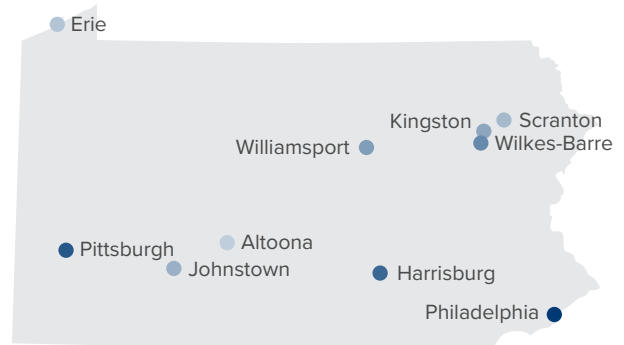


¹Comparison of count of properties within a Special Flood Hazard Area (1 in 100 year) versus those with 1% risk from the First Street Foundation Flood Model. Some counties may show higher FEMA counts due to a variety of factors, including the generalization of SFHAs, assumptions around flood protection measures, and local context. FEMA zones are estimated by MassiveCert, Inc. ²Substantial risk is calculated as inundation 1 cm or more to the building in the 100 return period (1% annual risk) and rounded to the nearest 100 properties. See methodology for full model details.

Pennsylvania cities with the greatest number of properties at risk³

Percentages reflect total number of community properties having some level of flood risk.

Municipality	2020		2050		Change	
	Count	%	Count	%	Count	%
Philadelphia	53,378	10%	60,561	11%	+7,183	+13.5%
Pittsburgh	21,803	15%	22,373	16%	+570	+2.6%
Harrisburg	7,395	37%	7,686	39%	+291	+3.9%
Wilkes-Barre	6,919	44%	6,984	44%	+65	+0.9%
Williamsport	5,039	53%	5,152	55%	+113	+2.2%
Kingston	4,869	98%	4,906	99%	+37	+0.8%
Johnstown	4,532	41%	4,586	41%	+54	+1.2%
Scranton	3,558	13%	3,652	14%	+94	+2.6%
Erie	3,287	9%	3,405	9%	+118	+3.6%
Altoona	3,276	15%	3,386	15%	+110	+3.4%



³Risk is calculated as inundation of 1 cm or more to the building in the 500 return period (0.2% annual risk). See methodology for full model details. Threshold of at least 2,000 properties for municipalities shown.

587,000
Pennsylvania properties at risk over the next 30 years

203,000
properties will face an "almost certain risk" with 99% chance of being impacted by a flood

9.9%
of all Pennsylvania properties are at substantial risk of flooding today

25%
of all flood insurance claims come from low- to moderate-risk flood zones
(source: FEMA)

Floods are the #1
natural disaster in the United States

\$69,000
average flood claim from 2005-2020
(source: FEMA)

14 federal disasters
were declared in Pennsylvania between 2003 & 2018 as a result of floods, extreme storms, and hurricanes
(source: <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2019/01/pennsylvania-flood-risk-and-mitigation>)

PENNSYLVANIA STORM SIMULATION

Using its proprietary risk model, First Street Foundation recreated 5 major storm/flooding events that occurred since the year 2000 and calculated the number of properties that would be affected had the same storm/even struck today. Its findings are shocking.

Flood Event	Date	# Properties affected
Hurricane Isabel	2003 Sep	160
River flood near Harrisburg, PA	2004 Sep	8,565
River flood near Pittsburgh, PA	2004 Sep	5,020
Nor'easter	2009 Nov	69
Hurricane Irene	2011 Aug	10
River flood across central Pennsylvania ⁴	2011 Sep	13,277

⁴Source: Fema.gov

Based on model simulation of historic events. Historic recreations do not include precipitation. See methodology for full model details.

Since 2000, nearly 257,100 Pennsylvania property owners have made flood insurance claims through the National Flood Insurance Program or the Individual Assistance Program.

Check your flood risk

NFS RECOMMENDS

- 1** Raise awareness of community risk of flood with free social media tools
- 2** Check your clients flood risk at floodfactor.com
- 3** Create a custom quote for your client at <https://nationalfloodservices.com/agents-portal/agents/>
- 4** Inform your clients of their personal flood risk using our customizable email/letter and postcard templates.

Our resources include:

Social Media Tools

Email/Letter Templates

Mailer Templates

Get your Pennsylvania Flood Toolkit here