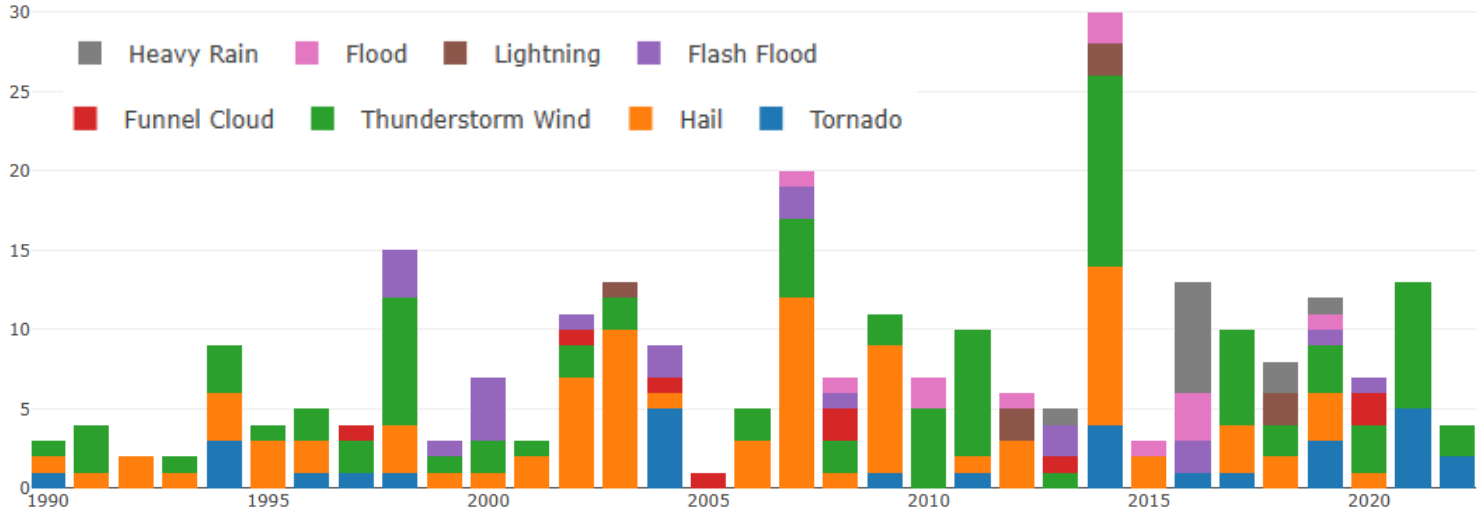
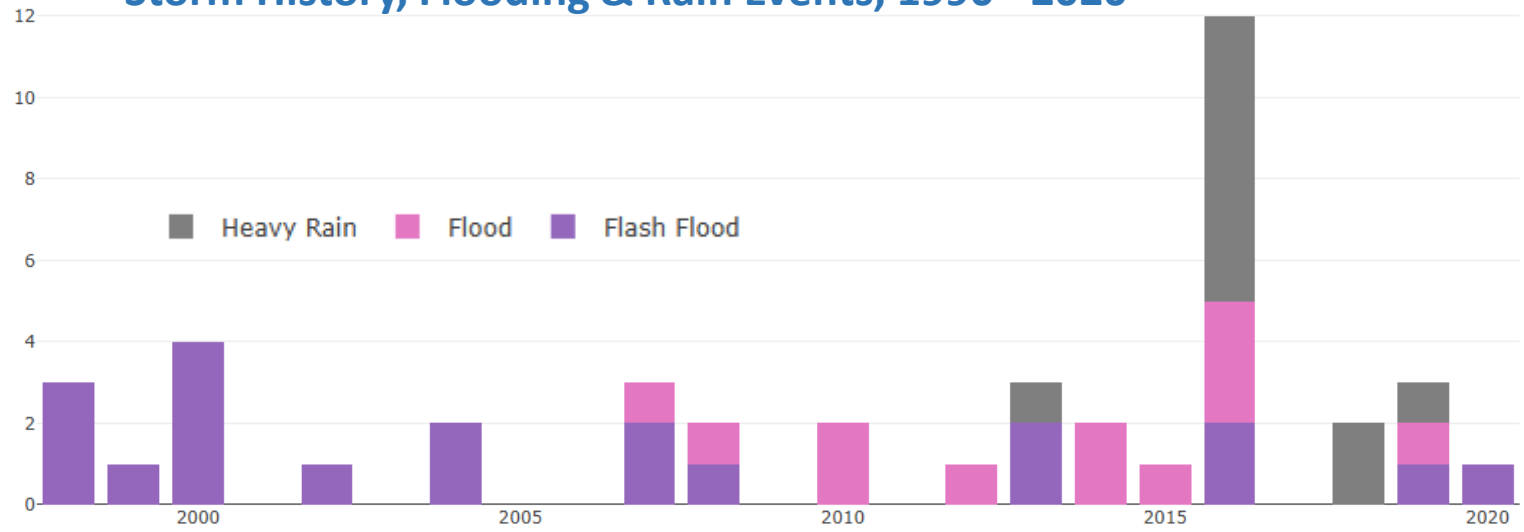
Stats America, Analysis Platform for Risk, Resilience, and Expenditures in Disasters (APRED) Analysis, Howard Co:

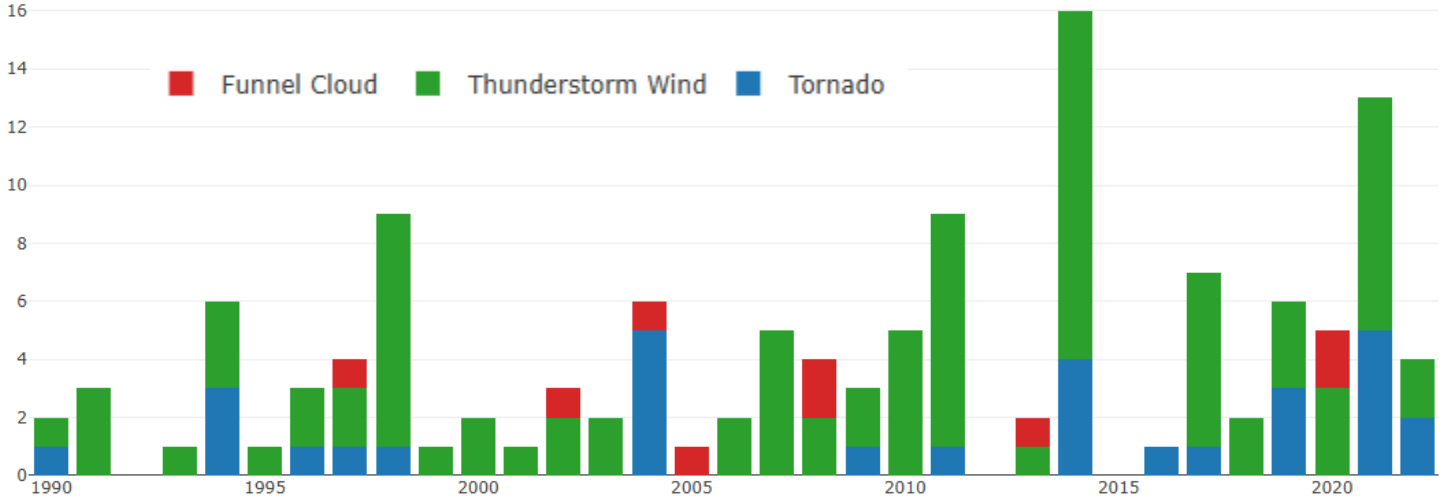
Storm History Howard County, 1990 - 2020



Storm History, Flooding & Rain Events, 1990 - 2020



Storm History, Wind & Tornado Events, 1990 - 2020



Hazards

National Risk Index
Estimated Annual Losses (EAL)

Hazard	EAL	Risk Score
Cold wave	$204.962	Relatively Moderate
Drought	$316,411	Very Low
Earthquake	$5,597	Very Low
Hail	$261,386	Relatively Low
Heat wave	$35,624	Relatively Low
Hurricane	$3,012	Very Low
Ice storm	$76,932	Relatively Low
Landslide	$21,900	Relatively Low
Lightning	$35,176	Very Low
Riverine flooding	$481,922	Relatively Low
Strong wind	$1,268,431	Relatively Moderate
Tornado	$1,192,597	Relatively Low
Wildfire	$7,243	Very Low
Winter weather	$74,201	Relatively Low

Source: FEMA National Risk Index

Howard Co Hazard Mitigation Plan Cresco Hazard Risks:

- Infrastructure failure – concerned due to the age of stormwater infrastructure below ground, aging retention ponds, as well as Highway 9 running through the community
- Thunderstorm/Lightning/Hail - is a concern especially during events such as the Howard Co. Fair, and there have been two lightning strikes that have affected City Hall & the Library
- Cybersecurity – a concern for the Cresco being the county seat, a cybersecurity attack could be detrimental to the city as well as the whole county

Cresco Mitigation Actions:

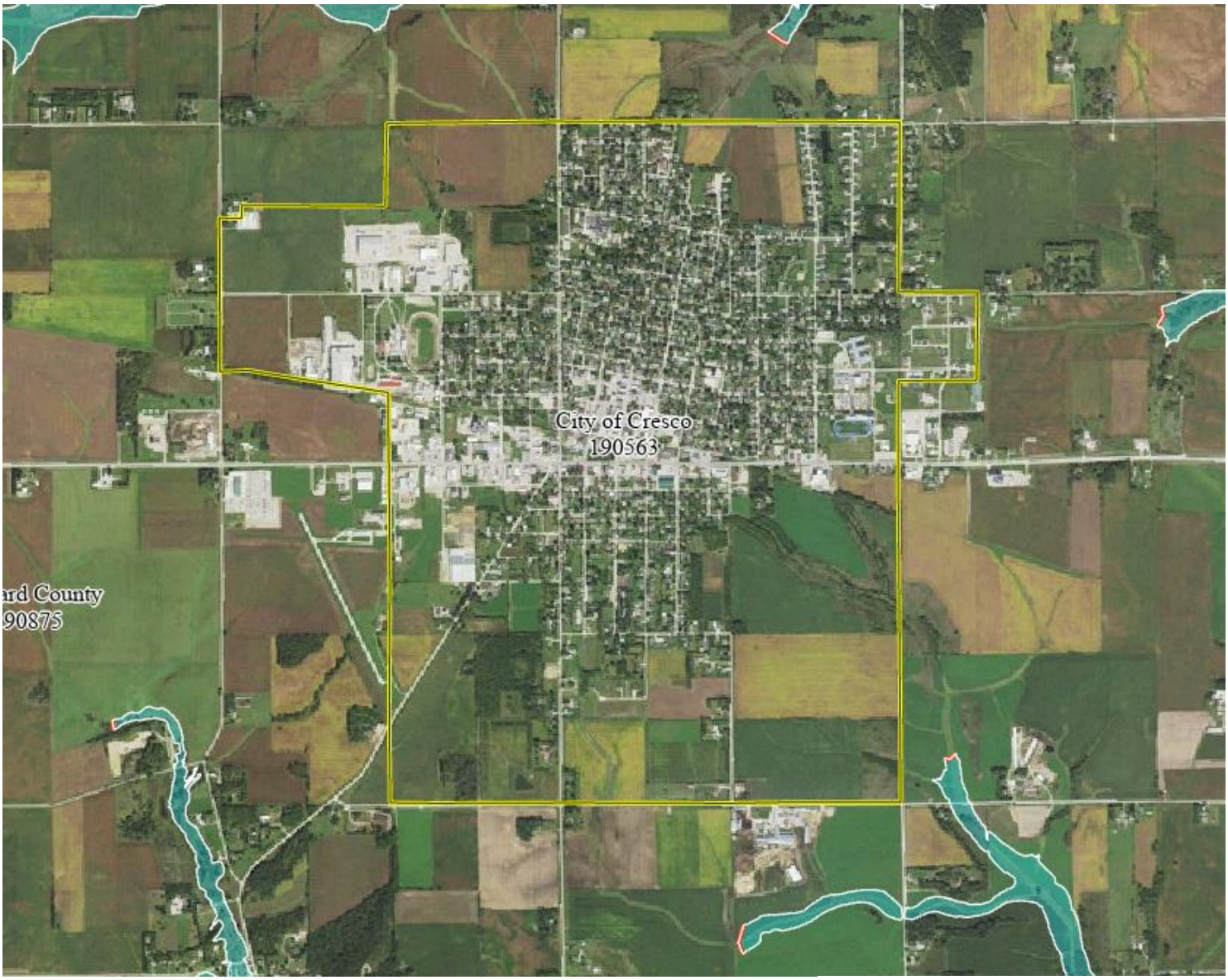
- Stormwater Management – Several mitigation actions related to mitigating the effects of heavy rainfall
- Interested in expanding their cybersecurity capabilities
- Mental Health Trainings and Education for residents and City employees
- Continue participation in floodplain management to allow residents the option for flood insurance.

Federal Emergency Management Agency (FEMA) Disaster Declarations (2001 – 2022)

Hazard	Years	Number
Hurricane	2005	1
Tornado	n/a	0
Severe Storm	2004,2007,2008,2010,2013,2013,2018,2021	8
Flood	2016,2016,2019,	3
Fire	N/A	0
Biological (COVID, etc.)	2020	1
Other (Ice storm, landslide, etc.)	N/A	0

Source: Stats America, Analysis Platform for Risk, Resilience and Expenditures in Disasters (APRED)

Flood Hazard Area



Source: FEMA NFHL Viewer

Water Areas

Limit of Moderate Wave Action

Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee

CJEST Climate Justice Tool Analysis:

Expected building loss rate: **Economic loss to building value resulting from natural hazards each year**

Sum of the building value at risk divided by total building value to get a wealth-neutral percent of building value at risk.

The Cresco is in the **75th percentile** compared to communities across the nation (*100th percentile = highest risk*). And 54th Percentile for Low-Income.

Related Hazards/Risks: Flooding, Severe Storms

Expected Agricultural Loss Rate: **Economic loss to agricultural value resulting from natural hazards each year**

Sum of the agricultural value at risk divided by total agricultural value to get a wealth-neutral percent of agricultural value at risk.

Cresco is in the **76th percentile** compared to communities across the nation.

Related Hazards/Risks: Drought, Extreme Heat

Lack of Green Space: **Amount of land, not including crop land, that is covered with artificial materials like concrete or pavement**

From the Multi-Resolution Land Characteristics (MRLC) consortium: the National Land Cover Database (NLCD)'s 2019 Percent Developed Imperviousness (CONUS) dataset.

Cresco is in the **81st percentile** compared to communities across the nation.

Related Hazards/Risks: Flooding, Extreme Heat

Lead Paint: **Share of homes that are likely to have lead paint**

Potential lead paint exposure is based on the percent of housing units built before 1960.

Cresco is in the **79th percentile** compared to communities across the nation.

Related Hazards/Risks: Infrastructure (Housing), Water Quality

NOTE: To be identified as **disadvantaged** in these categories, communities must be at or above the threshold for these burdens, i.e. at or above the 90th percentile. They must also meet the threshold for the low-income burden, which is at or above the 65th percentile.

NOTE: Low-Income is calculated by the percent of the population within a given census tract living at or below 200% of the federal poverty line.

Cybersecurity Threats:

Cybersecurity Definition:

Today's cyber landscape is threatened by a multitude of malicious actors who have the tools to conduct fraud schemes, hold our money and data for ransom, and endanger national security (Federal Bureau of Investigation , 2023). Cybersecurity is the effort to protect networks, devices, and data from unauthorized access or criminal use, and the practice of ensuring confidentiality, integrity, and availability of information for individuals and communities

Growing Probability of Cybersecurity Threats:

The FBI's Internet Crime Complaint Center (IC3) collects public reports on cybercrime. In 2023, IC3 received a record number of complaints: 880,418 complaints, 3,723 from Iowa (33rd in the nation) . This is a nearly 10% increase in complaints received.

Types of Cybersecurity Threats:

The nature of cybercrimes is they can occur anywhere and to any person or organization. Increased connectivity of people and devices to the Internet and to each other has created an ever-expanding attack surface. At the same time, some cyber attacks are more common, as are some victims. Some trends:

MALWARE - Short for "malicious software," this software is designed specifically to damage or disrupt a system, such as a virus.

RANSOMWARE - A type of malware that threatens to publish or block access to data until a ransom is paid.

BREACH - An incident that resulted in confirmed disclosure (not just exposure) to an unauthorized party.

PHISHING - The illegal practice of sending email claiming to be from reputable companies in order to induce individuals to reveal personal information, such as passwords and social security numbers.

Top Cybersecurity Crime Types:

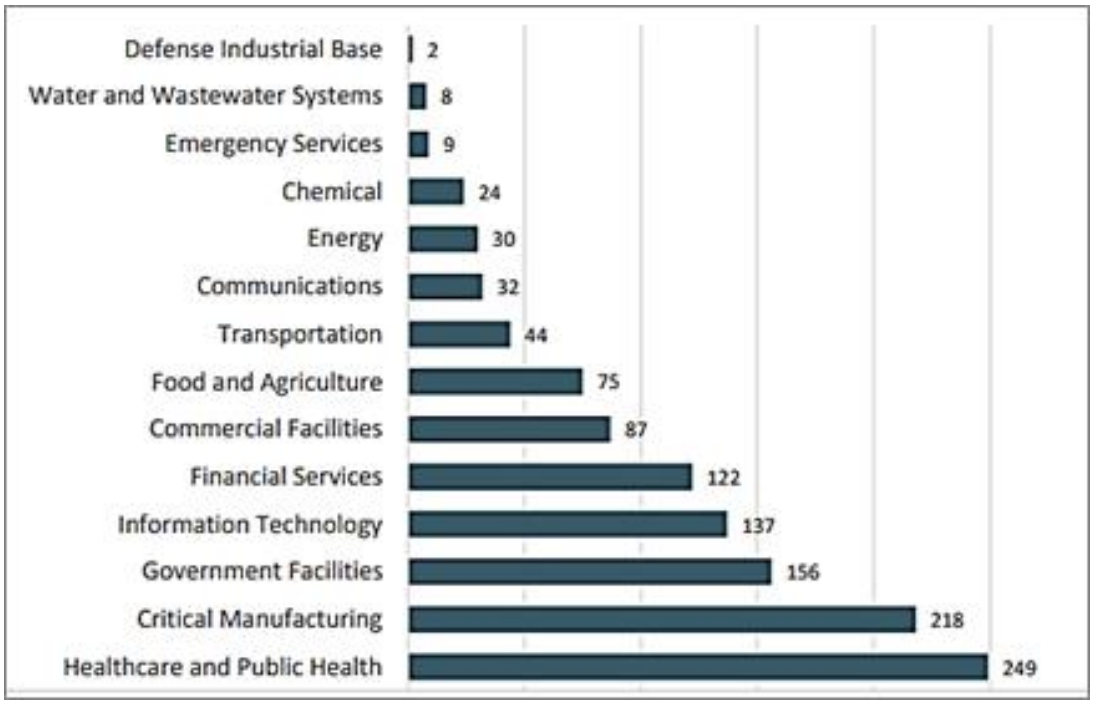
By Complaint Count			
Crime Type	*Complaints*	*Crime Type*	*Complaints*
Phishing/Spoofing	298,878	Other	8,808
Personal Data Breach	55,851	Advanced Fee	8,045
Non-payment/Non-Delivery	50,523	Lottery/Sweepstakes/Inheritance	4,168
Extortion	48,223	Overpayment	4,144
Investment	39,570	Data Breach	3,727
Tech Support	37,560	Ransomware	2,825
BEC	21,489	Crimes Against Children	2,361
Identity Theft	19,778	Threats of Violence	1,697
Confidence/Romance	17,823	IPR/Copyright and Counterfeit	1,498
Employment	15,443	SIM Swap	1,075
Government Impersonation	14,190	Malware	659
Credit Card/Check Fraud	13,718	Botnet	540
Harassment/Stalking	9,587		
Real Estate	9,521		
*Descriptors**			
Cryptocurrency	43,653	Cryptocurrency Wallet	25,815

(Source: Federal Bureau of Investigation , 2023)

Cybersecurity Threats:

Cybersecurity Threat Impacts:

Infrastructure Sectors Affected by Ransomeware:



(Source: Federal Bureau of Investigation , 2023)

U.S. Cybersecurity Losses 2023:

By Complaint Loss

Crime Type	*Loss*	*Crime Type*	*Loss*
Investment	$4,570,275,683	Extortion	$74,821,835
BEC	$2,946,830,270	Employment	$70,234,079
Tech Support	$924,512,658	Ransomware*	$59,641,384
Personal Data Breach	$744,219,879	SIM Swap	$48,798,103
Confidence/Romance	$652,544,805	Overpayment	$27,955,195
Data Breach	$534,397,222	Botnet	$22,422,708
Government Impersonation	$394,050,518	Phishing/Spoofing	$18,728,550
Non-payment/Non-Delivery	$309,648,416	Threats of Violence	$13,531,178
Other	$240,053,059	Harassment/Stalking	$9,677,332
Credit Card/Check Fraud	$173,627,614	IPR/Copyright and Counterfeit	$7,555,329
Real Estate	$145,243,348	Crimes Against Children	$2,031,485
Advanced Fee	$134,516,577	Malware	$1,213,317
Identity Theft	$126,203,809		
Lottery/Sweepstakes/Inheritance	$94,502,836		

(Source: Federal Bureau of Investigation , 2023)