CITIES TO BE MOST AFFECTED BY CLIMATE CHANGE

City	Rising Sea-level	Extreme Precipitation	Extreme Drought	Urban Heat Islands*	Change in Temperature
1. New Orleans					
2. Minneapolis				2	
3. Las Vegas			6	2	
4. New York					
5. Kansas City			6	2	
6. Boston	~				
7. Denver				2	
8. St. Paul			6		
9. Washington, D.C.				2	
10. Philadelphia				2	
11. Buffalo				2	
12. Baltimore					
13. Portland				2	
14. Columbus				2	
15. Pittsburgh				2	
16. Detroit				2	
17. St. Louis				2	
18. Milwaukee					
19. Miami					
20. Seattle				2	
21. Louisville				<u> </u>	
22. Lincoln			6		
23. Madison					
24. Anchorage					
25. Newark					1

*Urban heat islands occur when a city experiences much greater heat than surrounding rural areas. © World Without Genocide 2017

GENOCIDE AT MITCHELL HAMLINE SCHOOL OF LAW

1. New Orleans

New Orleans is losing ground, fast: Almost **1,900 square miles have disappeared** in less than a century. Large numbers of Louisiana cities, roads, railways, ports, airports, oil and gas facilities, and water supplies are at low elevations and vulnerable to the impacts of sea level rise. New Orleans, with roughly half of its population living below sea level, is especially at risk.

2. Minneapolis

Minneapolis could get pummeled from a lot of different angles. The city itself will be much hotter than rural places close by. **Precipitation has increased by almost 40%** since 1958, a trend expected to continue. Drought will continue to worsen.

3. Las Vegas

The urban heat island effect, when a city experiences much greater heat than the surrounding areas, is at its worst. Las Vegas has the greatest difference in temperatures between the city and nearby areas of any city analyzed. Drought is getting worse, too, as heat slowly creeps upward. Over the last century, the average annual temperature has increased about 1.5°F in the southwest. Average **annual** temperature is projected to rise an additional 2.5-8°F by the end of the century.

4. New York

Hurricane Sandy demonstrated that New York City isn't immune from the impact of large hurricanes. It could be in the line of fire more frequently, with extreme precipitation increases coming. Coastal sea levels are projected to increase **18 to 75 inches** by the end of the century. Damage threatens not only communities and infrastructure, but also ecosystems that buffer against floods, protect drinking water, and provide habitat for important species.

5. Kansas City

Urban heat islands and extreme drought put Kansas City at number five. The city will see **20 more days above 90 degrees** than its rural counterparts, plus more drought. Average annual temperatures have risen, accompanied by a number of major heat waves in the last few years. There have been fewer cold snaps, and ice and snow are melting sooner and arriving later. Heavy rains are occurring about twice as frequently as they did a century ago, increasing flood risk.

6. Boston

The winter of 2015 was the **snowiest on record** for Boston, with 110 inches. More extreme precipitation events like that are expected across Massachusetts and up and down the eastern seaboard — the same areas potentially in trouble from rising sea levels and future storms.

7. Denver

Denver will experience significant heat increases, **23 degrees hotter** than in nearby rural areas.

8. St. Paul

St. Paul will be significantly impacted by **extreme future drought**. Extreme precipitation will also likely increase.

9. Washington, D.C.

The capital sits along the Atlantic Coast and is at risk for flooding. Precipitation is expected to increase. This city is sixth in terms of the biggest temperature differences between urban and rural locales.

10. Philadelphia

Philadelphia is exposed to flood loss from sea-level rise, the urban heat island effect, extreme precipitation, and extreme drought. Plus, it's on the Atlantic Coast, adding hurricane risk to the picture.

11. Buffalo

This New York city 20 miles from Niagara Falls experienced more than seven feet of lake-effect snow during the fall of 2014. This type of extreme precipitation event will continue to increase across the region. It will also be up to **24 degrees warmer** in Buffalo than its surrounds.

12. Baltimore

Extreme precipitation and the threat of risk from future floods and sea-level rise could greatly affect Baltimore. By 2050 **the state could see another foot of sea-level rise**; by century's end, that could triple to three feet, contributing to higher storm wave heights, greater coastal flooding, shoreline erosion, and damage to property and infrastructure.

13. Portland

Portland's urban heat island effect makes it up to **19 degrees hotter** in the summer than nearby places and there will be extreme precipitation and drought.

14. Columbus

Columbus will experience temperatures up to 24 degrees hotter than surrounding areas, with an average of 16 more days above 90 degrees than its rural Ohio counterparts. Across Ohio, **extreme precipitation increased almost 40 percent** from 1958 to 2012 — a trend that will continue.

15. Pittsburgh

Like much of the northeast, extreme precipitation is expected to increase significantly across the entire state of Pennsylvania, and the urban heat island effect will have some impact here.

16. Detroit

Detroit has the potential to be 22 degrees hotter than nearby rural areas.

17. St. Louis

The urban heat island factor is the biggest concern because of its inland location and the fact that the land-sea breeze doesn't play a role like it does with some coastal cities. Toward the end of the century, the city could experience an **entire summer of days 90 degrees or hotter**, with 43 of those days breaking 100.

18. Milwaukee

Extreme precipitation and extreme drought will increase, as will average temperature.

19. Miami

Flooding in Miami could eventually make much of the city unlivable. This Florida city may face more challenges than any other in the country.

20. Seattle

Changes to precipitation during winter and spring, extreme precipitation, and the urban heat island effect play a part here.

21. Louisville

For Louisville, the biggest impact will be the **urban heat island effect**. Extreme precipitation also increased across the state of Kentucky by more than 25 percent from 1958 to 2012; this trend is expected to continue.

22. Lincoln

Across the board, precipitation changes, temperature changes, and extreme drought and precipitation events affect Nebraska's capital.

23. Madison

An increase in extreme precipitation plus changes to extreme drought will affect this city.

24. Anchorage

In the most extreme scenario, Alaska's largest city is likely to get wetter in both winter and springtime, resulting in fewer drought-like conditions. **Sea-level rise** is also a potential factor.

25. Newark

Extreme precipitation events are projected to increase significantly.