







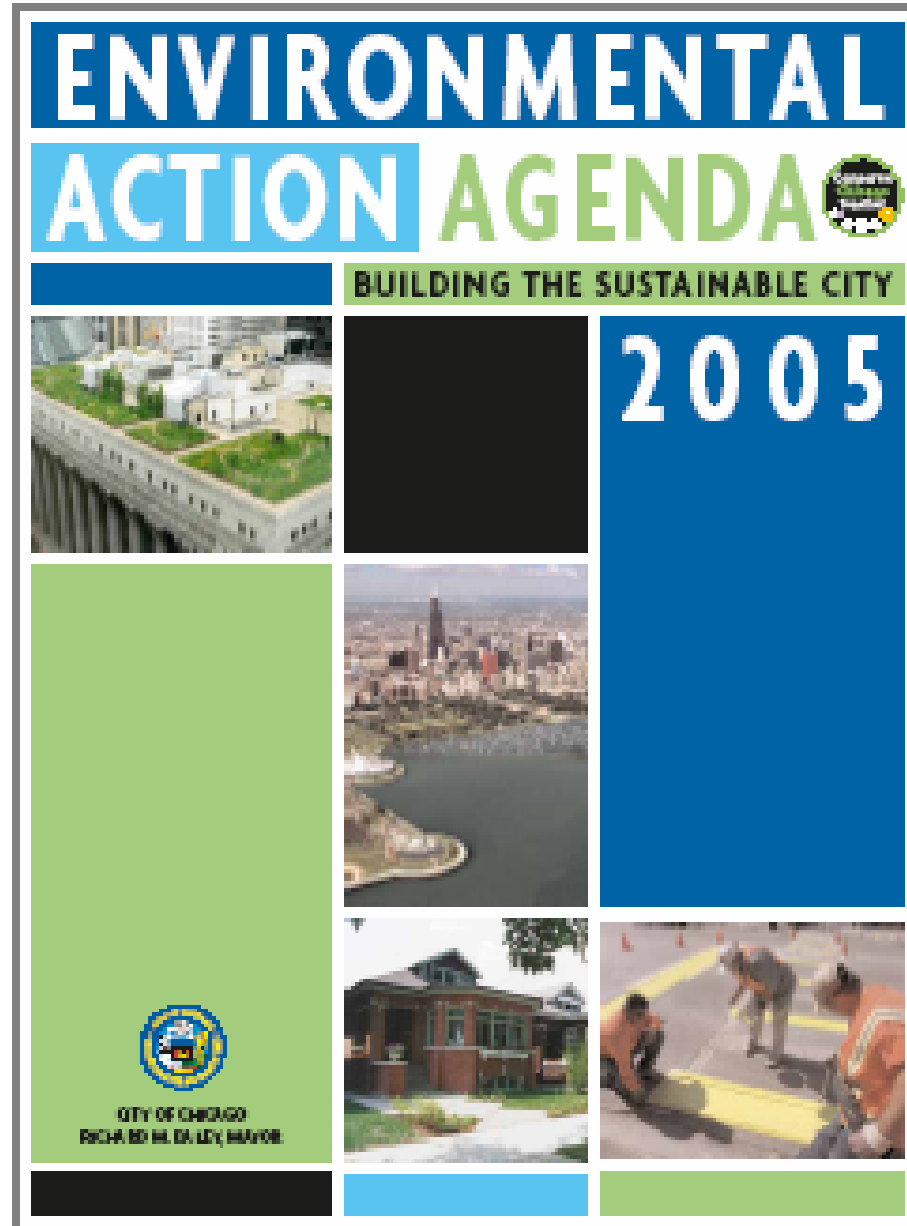








Leading By Example



CHICAGO
CLIMATE
ACTION

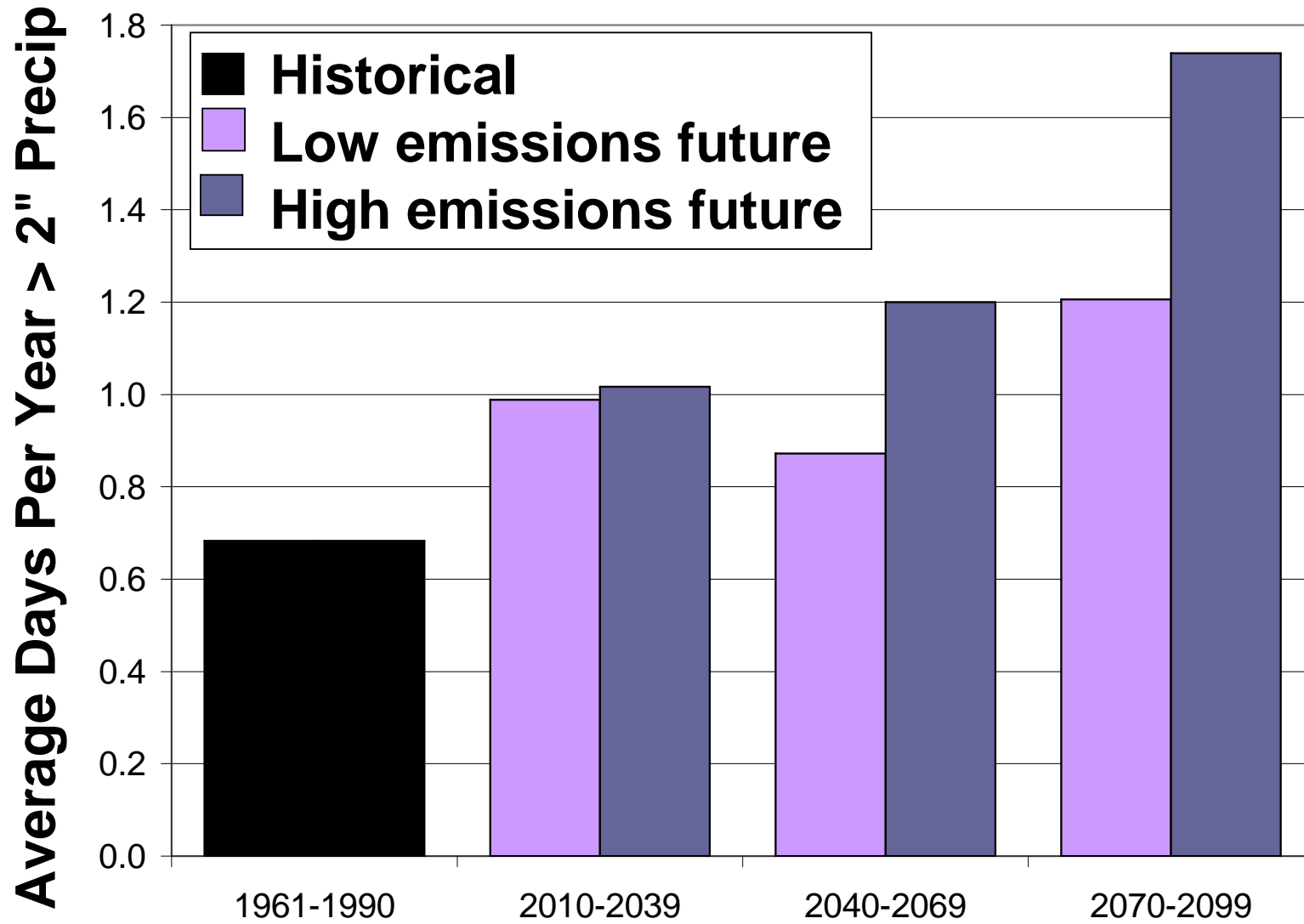


Higher Emissions:
31 days

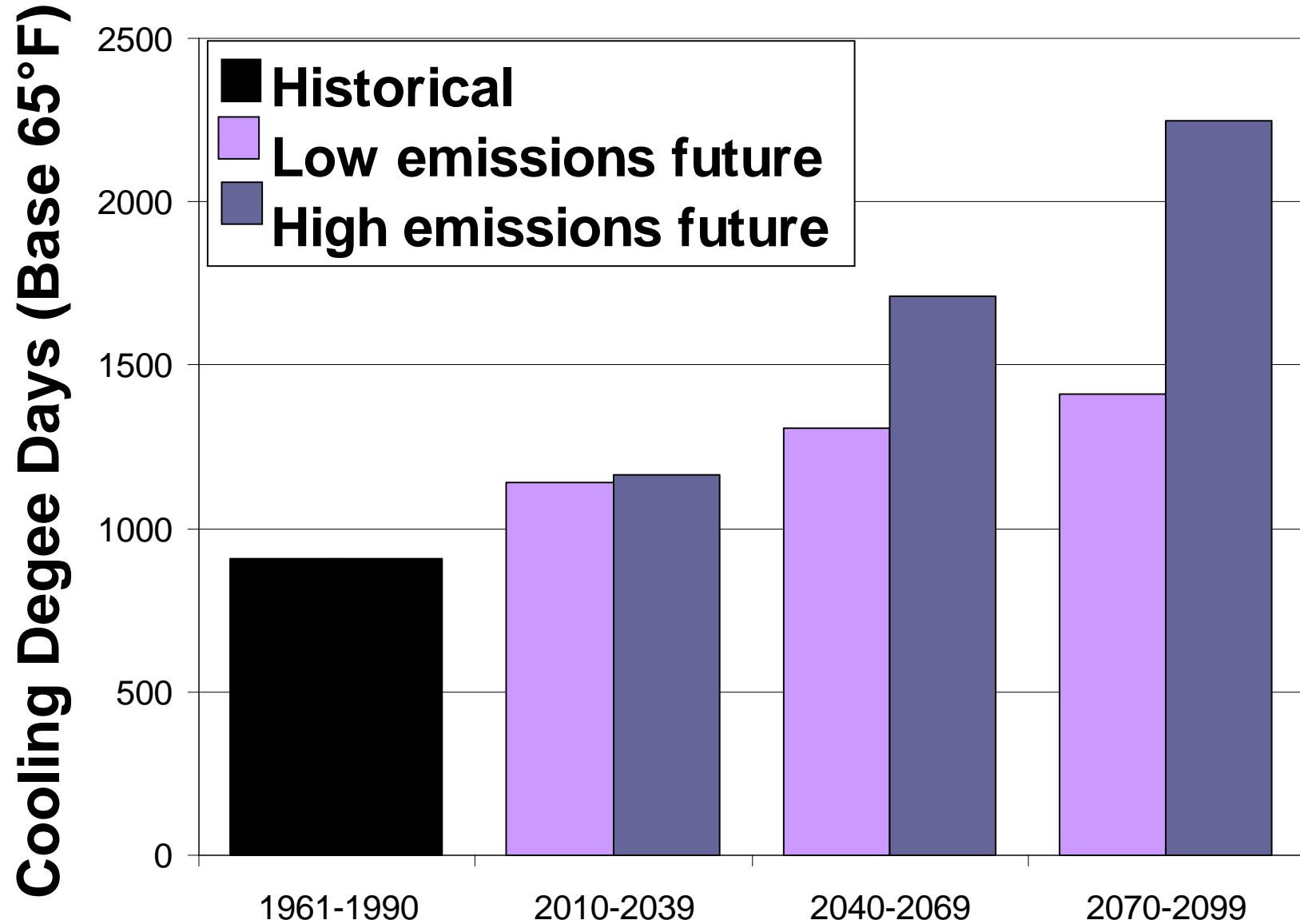
Projected
number of 100-
degree days
per year in
Chicago

Lower Emissions:
8 days

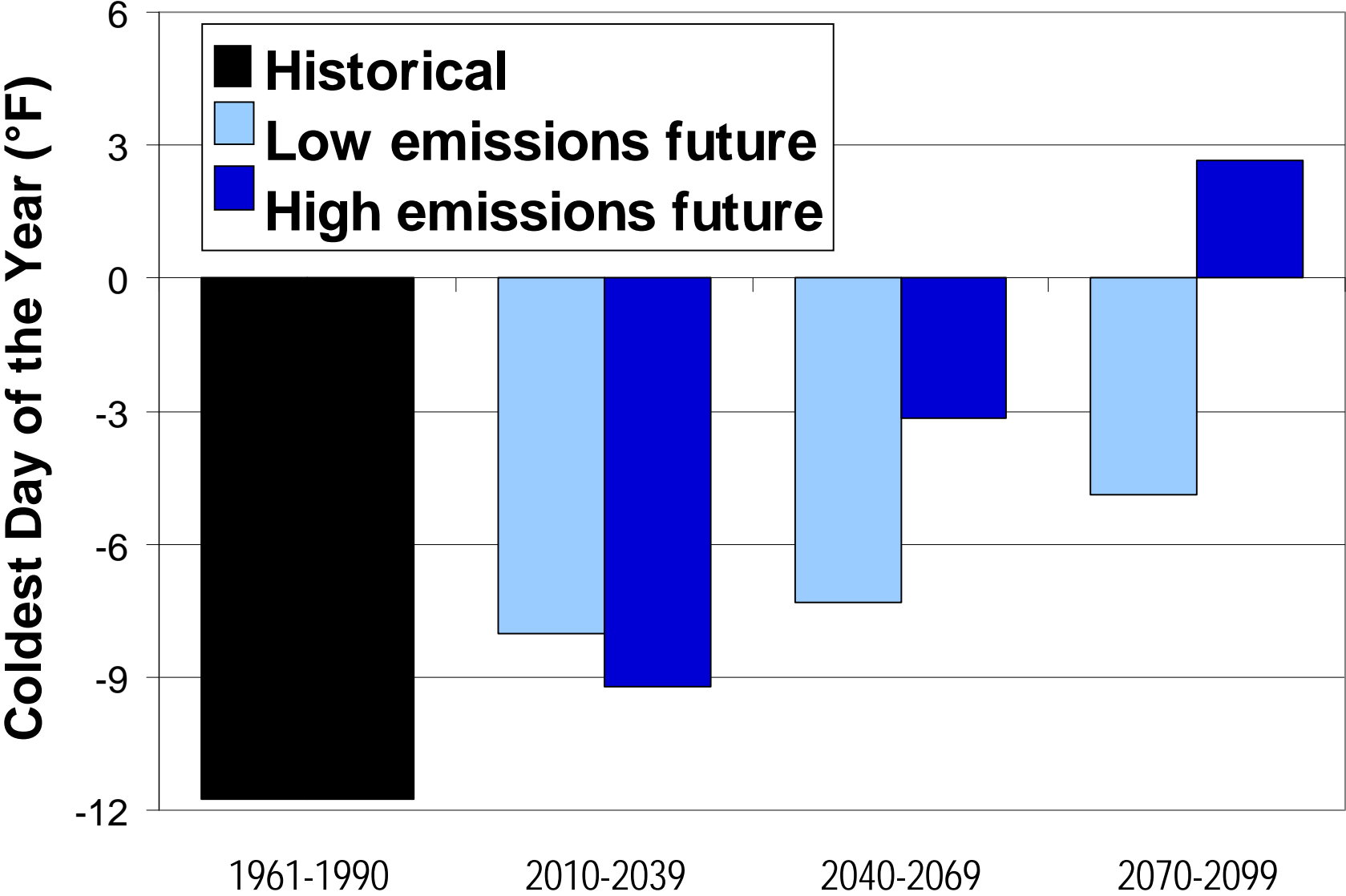
Extreme Precipitation



Cooling Degree Days

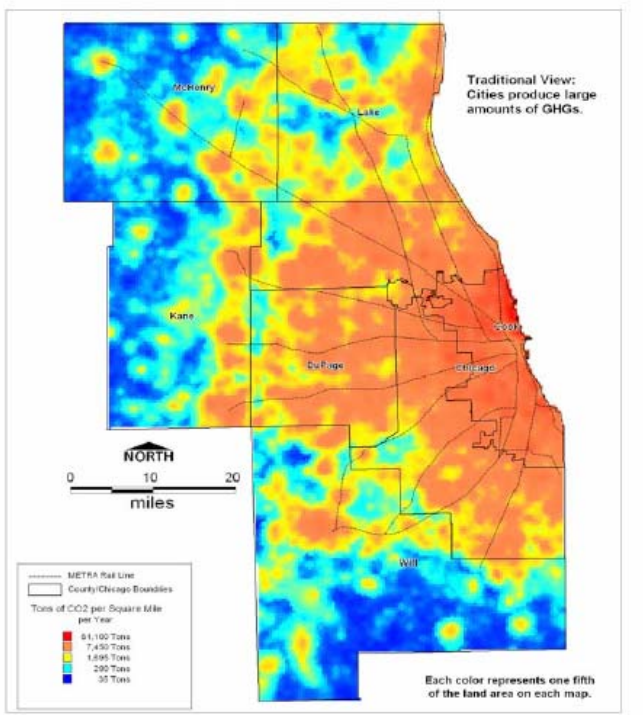


Coldest Day of the Year



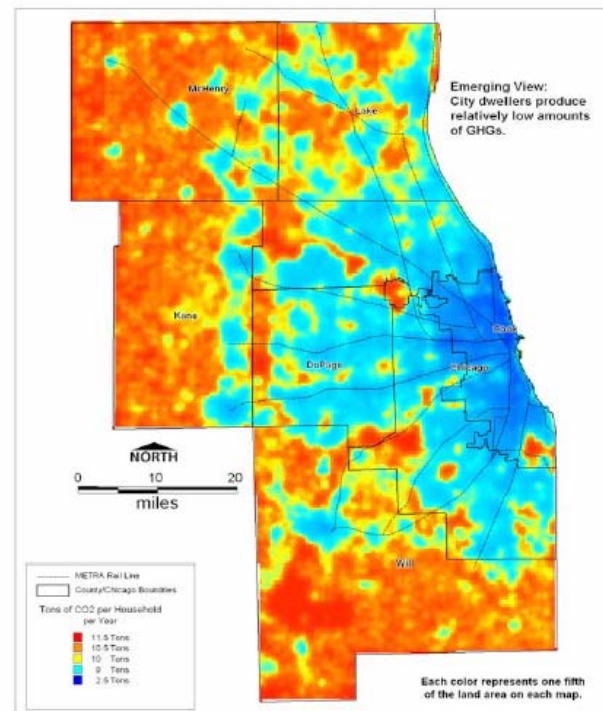
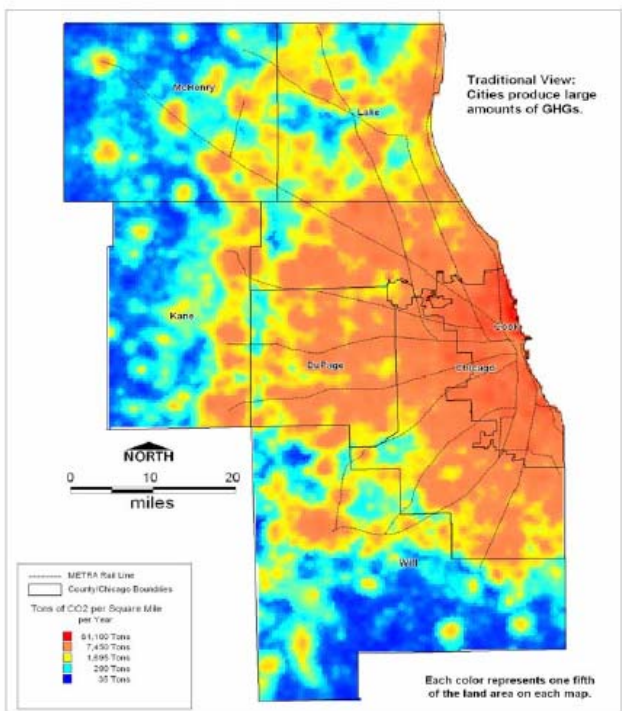


THE ROLE OF CITIES



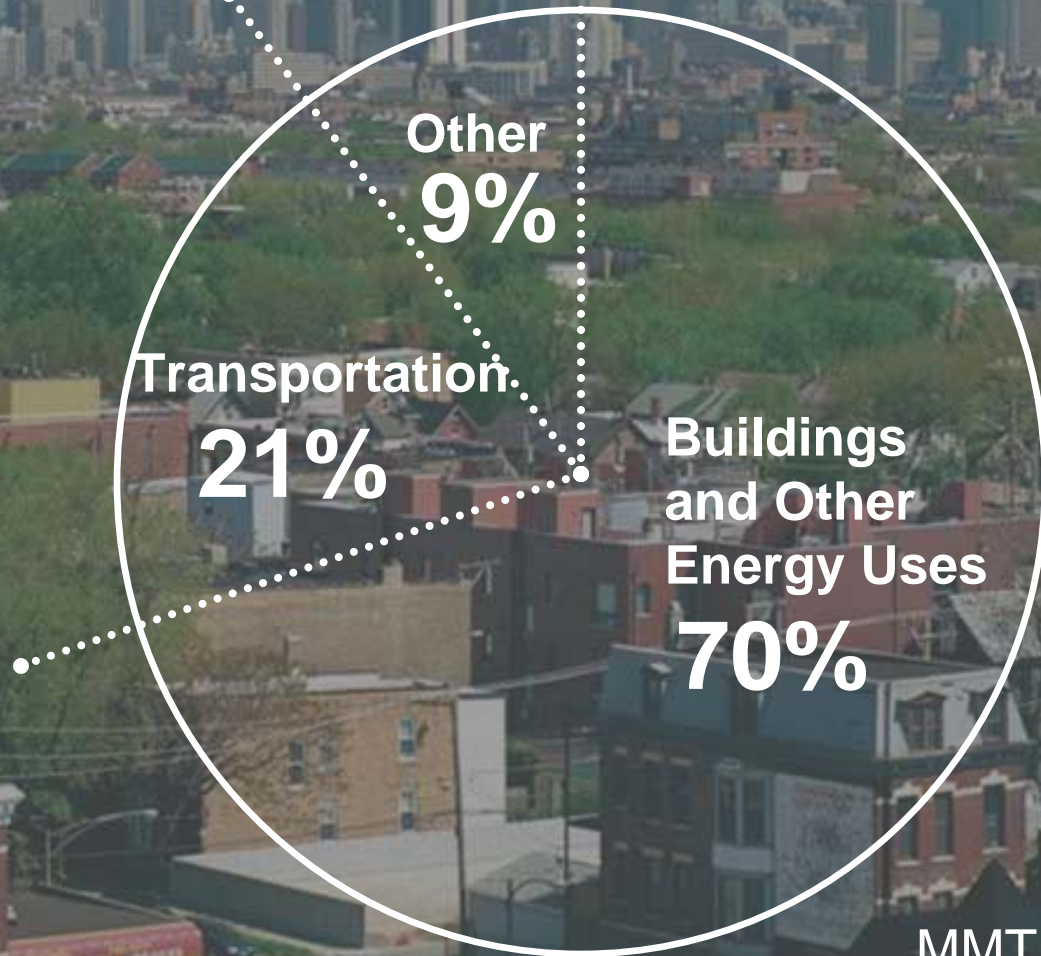


THE ROLE OF CITIES



2000 Chicago Greenhouse Gas

34.6 MMTCO₂e



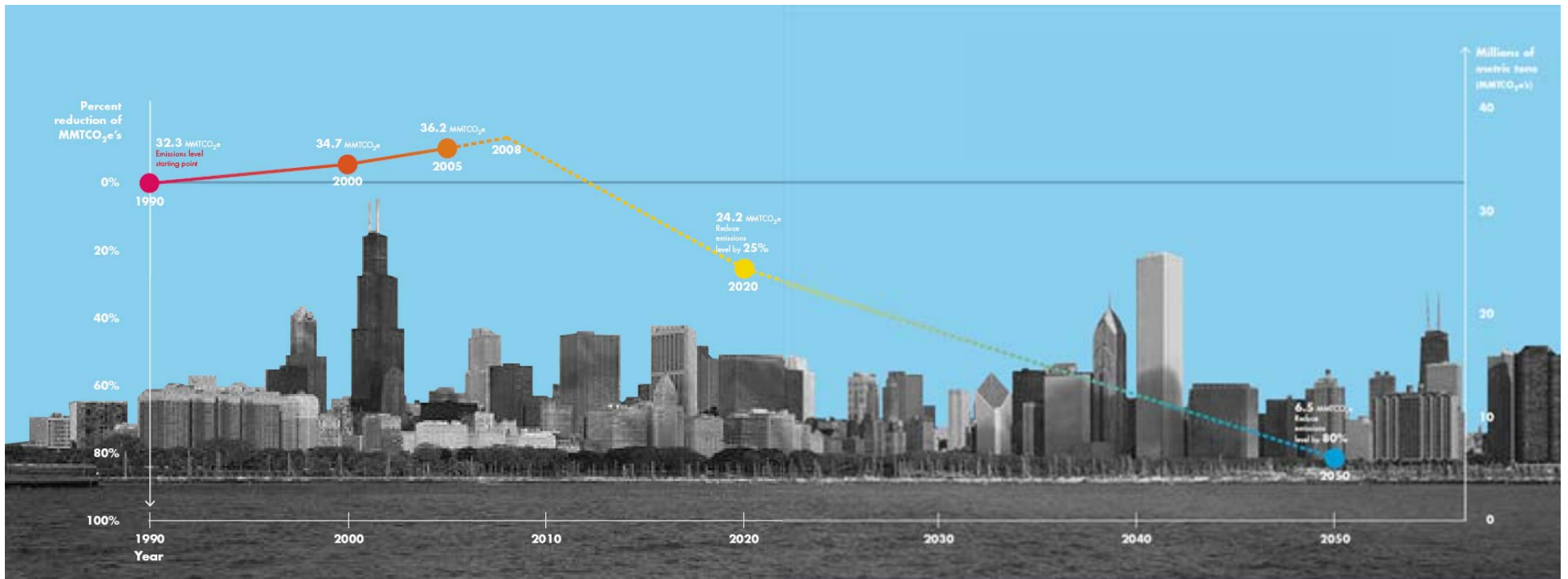
MMT: Million Metric Tons

2000 6-County Greenhouse Gas

105.1 MMTCO₂e



MMT: Million Metric Tons



Chicago Greenhouse Gas Emissions and Reduction Goals:

- **80 percent reduction from 1990 levels by 2050**



FIVE STRATEGIES

ADDRESSING THE CHALLENGE
OF CLIMATE CHANGE

ENERGY EFFICIENT BUILDINGS
8 ACTIONS

CLEAN & RENEWABLE ENERGY SOURCES
5 ACTIONS

IMPROVED TRANSPORTATION OPTIONS
10 ACTIONS

REDUCED WASTE &
INDUSTRIAL POLLUTION
3 ACTIONS

PREPARATION
9 ACTIONS

=

35 WAYS

TO ENSURE A RESILIENT CITY



STRATEGY 1.

ENERGY EFFICIENT BUILDINGS

GOAL:
REDUCE ENERGY USE IN BUILDINGS

CO-BENEFITS:

- reduced energy costs
- jobs
- improved air quality and health
- water conserved
- quality of life
- preparation



8 Actions

1. Retrofit commercial and industrial buildings
2. Retrofit residential buildings
3. Trade in appliances
4. Conserve water
5. Update city energy code
6. Establish new guidelines for renovations
7. Cool with trees and green roofs
8. Take easy steps



STRATEGY 2.
CLEAN & RENEWABLE ENERGY SOURCES

GOAL:
TURN TO CLEANER AND RENEWABLE ENERGY SOURCES

CO-BENEFITS:

- 👤 jobs
- 🌬️ improved air quality and health
- 🔌 preparation



of Total Chicago GHG Reductions
= 5.31 MMTCO₂e

5 Actions

1. Upgrade power plants
2. Improve power plant efficiency
3. Build renewable electricity
4. Increase distributed generation
5. Promote household renewable power



STRATEGY 3.

IMPROVED TRANSPORTATION OPTIONS

GOAL:
USE A VARIETY OF TRANSPORTATION
MODES—AND CLEANER VEHICLES

CO-BENEFITS:

- reduced energy costs
- jobs
- improved air quality and health
- quality of life



of Total Chicago GHG Reductions
= 3.61 MMTCO_{2e}

10 Actions

1. Invest more in transit
2. Expand transit incentives
3. Promote transit-oriented development
4. Make walking and biking easier
5. Car share and carpool
6. Improve fleet efficiency
7. Achieve higher fuel efficiency standards
8. Switch to cleaner fuels
9. Support intercity rail
10. Improve freight movement

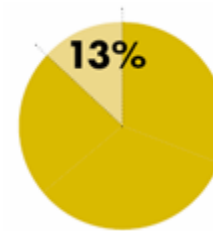


STRATEGY 4.
REDUCED WASTE & INDUSTRIAL POLLUTION

GOAL:
PREVENT, REDUCE, REUSE AND RECYCLE

CO-BENEFITS:

- reduced energy costs
- jobs
- improved air quality and health
- water quality



13% of Total Chicago GHG Reductions
= 2.03 MMTCO₂e

3 Actions

1. Reduce, reuse and recycle
2. Shift to alternative refrigerants
3. Capture stormwater on site



STRATEGY 5.
PREPARATION

GOAL:
MINIMIZE THE IMPACT OF CLIMATE CHANGE

CO-BENEFITS:

- reduced energy costs
- jobs
- improved air quality and health
- water quality
- quality of life



9 Actions

1. **Manage heat**
2. **Pursue innovative cooling**
3. **Protect air quality**
4. **Manage stormwater**
5. **Implement Green Urban Design**
6. **Preserve our plants and trees**
7. **Engage the public**
8. **Engage businesses**
9. **Plan for the future**

Adaptation Work Groups

Table ES-3 -- Actual First Generation Working Group Participants as of March 2008

	City Departments														Sister Agencies/Partners										
	Aviation	Budget	Buildings	Innovation and Technology*	Environment	Fire	Fleet Management	General Services	Housing	Human Services	OEMC	Planning and Development	Police	Procurement Services	Public Health	Streets and Sanitation	Transportation	Water Management	Chicago Park District	Chicago Public Schools	Chicago Transit Authority	Metropolitan Water Reclamation District	Chicago Housing Authority	Public Building Commission	Building Owners and Managers Association
WG 1: Extreme Heat	X	X	X	X	X			X	X	X		X									X				
WG 2: Extreme Precipitation					X	X				X	X			X	X	X	X	X	X		X	X			
WG 3A: Buildings			X	X	X			X	X		X		X	X	X	X	X	X	X	X	X		X	X	X
WG 3B: Infrastructure	X		X	X	X		X	X	X		X		X	X	X	X	X	X	X	X	X		X	X	X
WG 3C: Equipment	X		X	X	X		X	X	X		X		X	X	X	X	X	X	X	X	X		X	X	X
WG 4: Ecosystems					X						X		X	X	X	X	X	X	X	X		X			
WG 5: Leadership, Planning and Communication		X	X	X	X					X	X		X		X				X	X	X	X		X	

Work Group Department Leads

Extreme Heat (**OEMC**)

Extreme Precipitation (**DWM**)

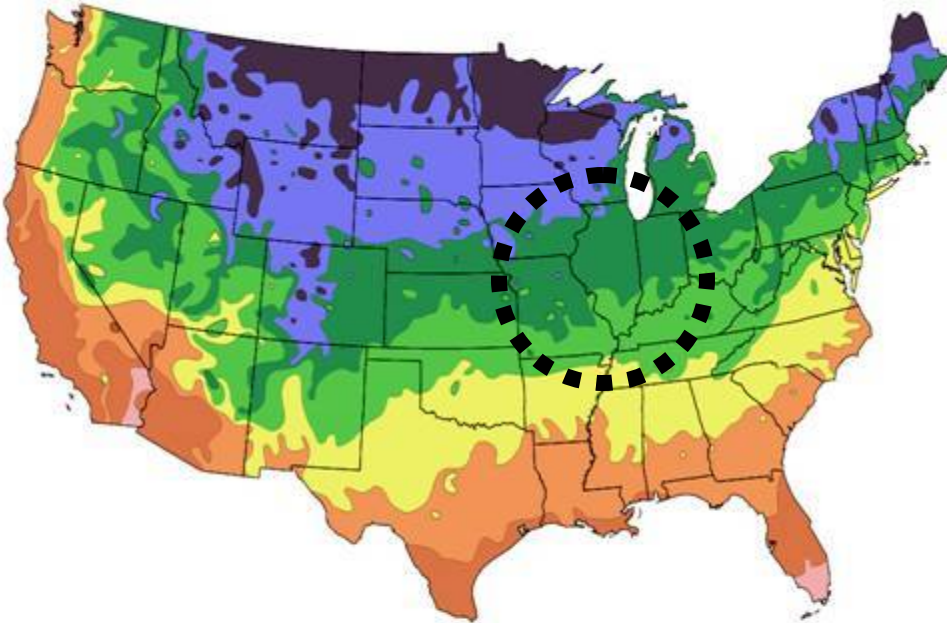
Buildings and Infrastructure (**DOB & DOT**)

Ecosystems (**DPD**)

Leadership, Planning and Communication (**DOE**)

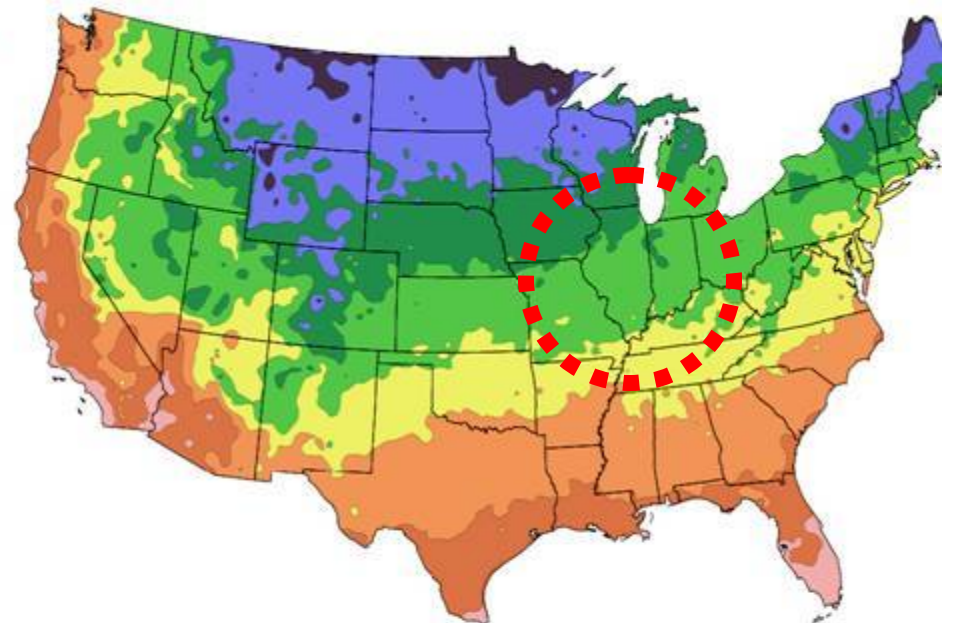
Climate Matters: Trees and Ecosystems

1990 Map



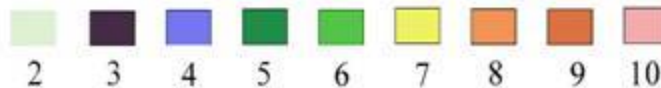
After USDA Plant Hardiness Zone Map, USDA Miscellaneous Publication No. 1475, Issued January 1990

2006 Map



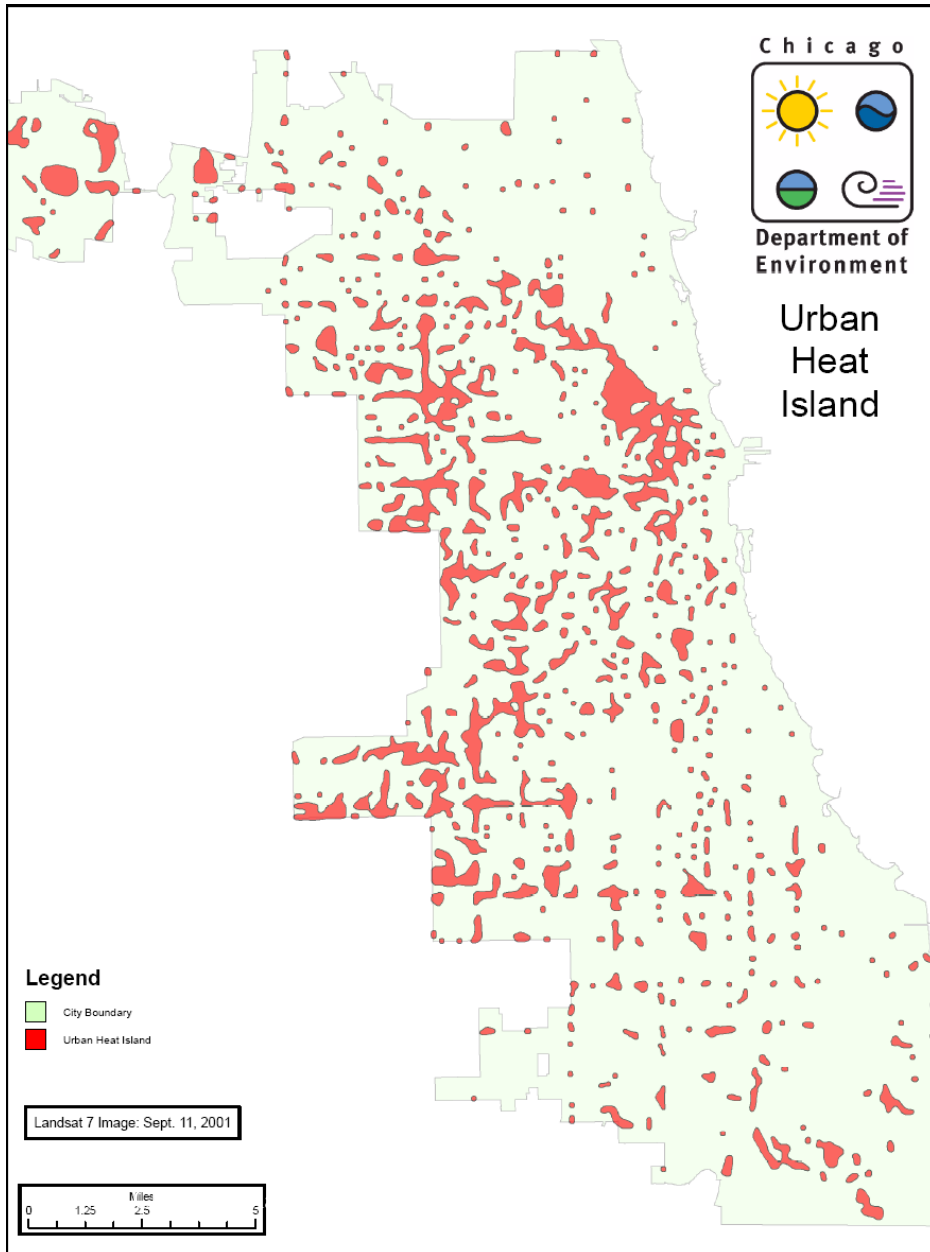
National Arbor Day Foundation Plant Hardiness Zone Map published in 2006.

Zone



Our region is already changing

Climate Change Adaptation



Street Trees Planted along LaSalle Bank Chicago Marathon Course

Legend

Temp. and Vegetation

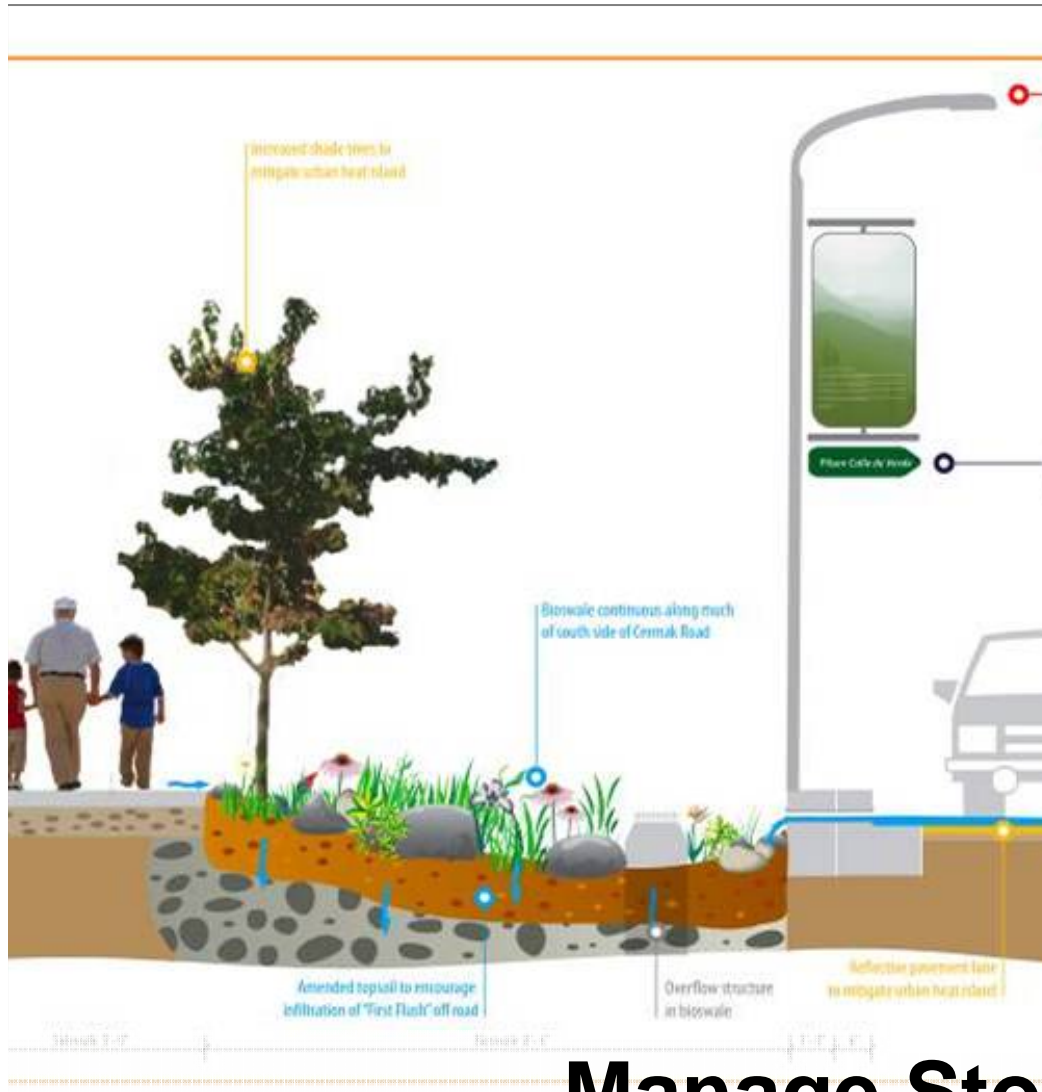
Vegetation

More ← → Less

● Trees Planted by BoF



Climate Change Adaptation



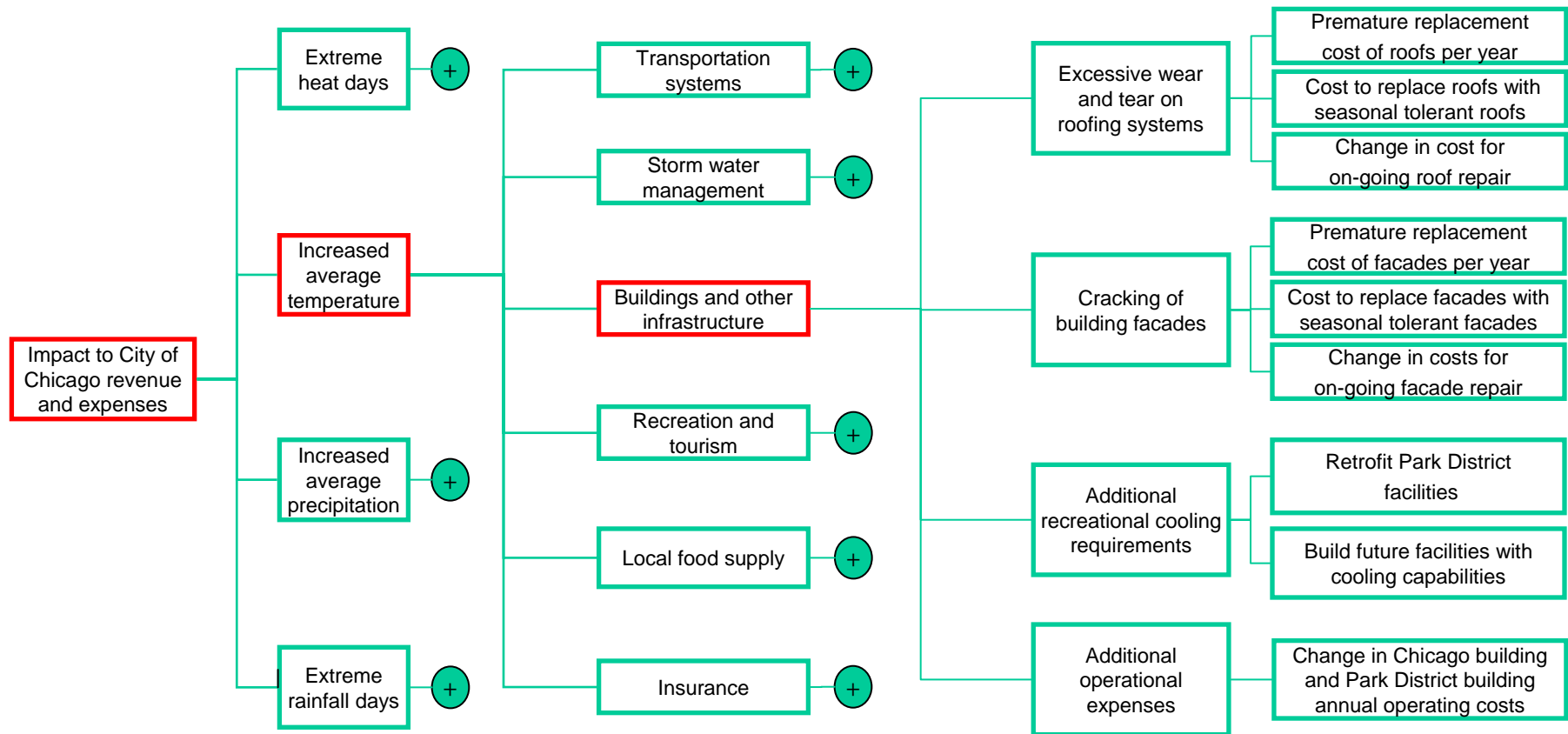
Manage Stormwater

Economic Impacts

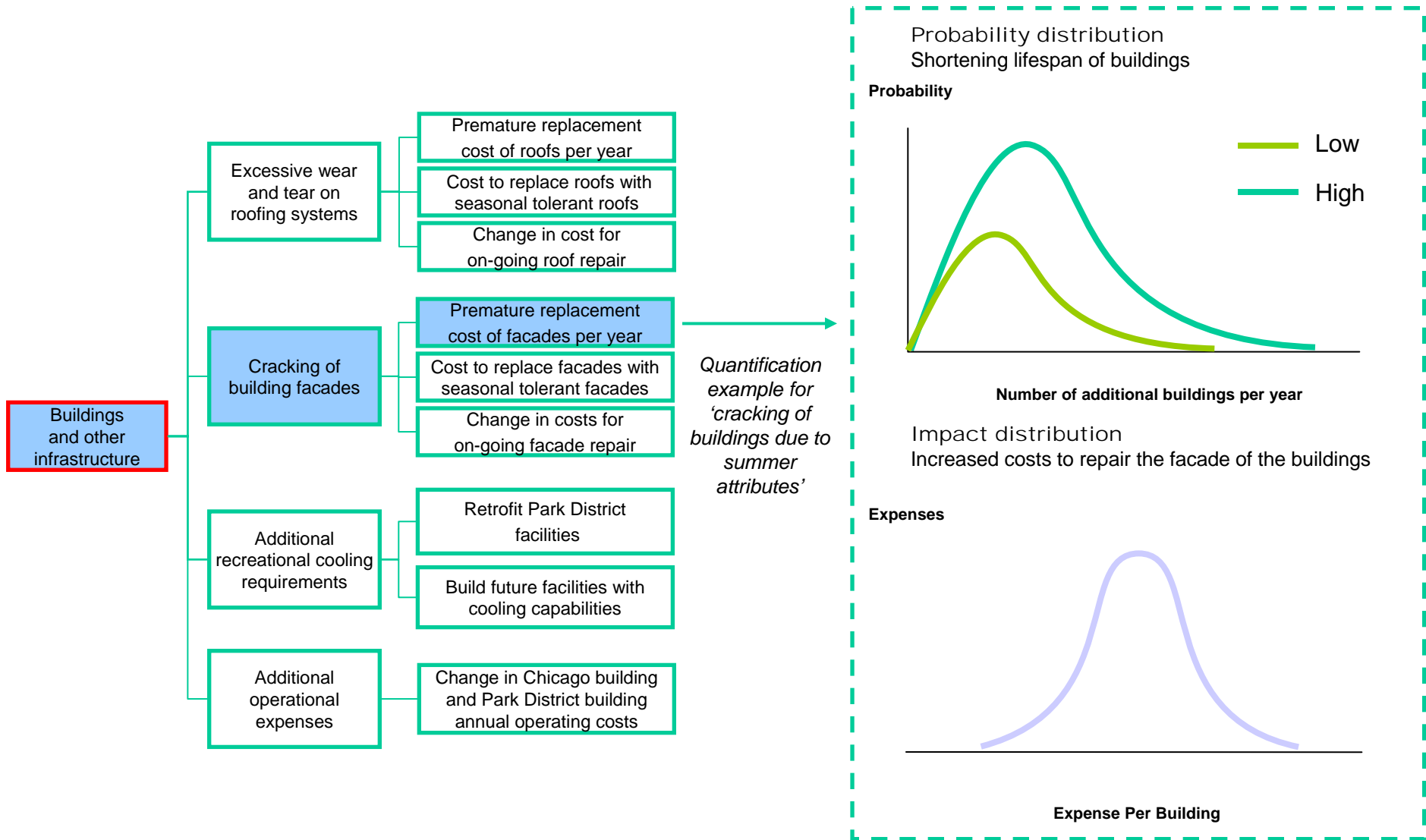
Each impact in the pyramid has a series of drivers organized in cause and effect chains and serves as the basis for risk quantification

Impact pyramid example:
Impact to City of Chicago revenue and expenses

Increased average temperature example:
Buildings and other infrastructure



Economic Impacts



Green Jobs



EVERYDAY ACTIONS



The success of the plan also depends on individuals—3 million of them.

www.ChicagoClimateAction.org

\$800 Savings Challenge

Take the \$800 Savings Challenge!

Each person can make a difference. Take the \$800 Savings Challenge and see how your small steps, taken together, can reduce emissions, save money and have a transformative impact on Chicago.

Take the first step towards making your difference by choosing some (or maybe even all) of the actions from the list below and see how your savings in both money and greenhouse gas emissions adds up. Your total will be calculated and appear at the bottom of the page. Send us your list and we'll add you to our email list to receive monthly updates.

Measure	Cost	Co2e Impact/ Participant (metric tons)	Annual Savings/ Participant or Household
BUILDINGS			
<input type="checkbox"/> Reducing heating temperature by three degrees*	None	0.522	\$129
<input type="checkbox"/> Increasing cooling temperature by three degrees*	None	0.075	\$13
<input type="checkbox"/> Save four gallons of water a day, by turning off the water while brushing teeth or reducing shower time by one minute.	None	0.003	\$5

Key worries for the future: cost of living, air quality, parking, noise, environment and housing

Q18. Are you personally very confident, somewhat confident, somewhat worried or very worried when you think about the future of the city where you are living?

All Respondents N =8,608

