

CLIMATE SMART INFRASTRUCTURE

Douglas Mason, Ph.D.

Assistant Director for Nature-Based Solutions

White House Office of Science and Technology Policy



ELEMENTS

- Policy
- Infrastructure best practices
- Informed decisions regarding climate risks
- Funding
- Engagement going forward



POLICY

Executive Order on Tackling the Climate Crisis at Home and Abroad



THE DIRECTOR

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

November 29, 2023

M-24-03

MEMORANDUM FOR HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM:

Shalanda D. Young

SUBJECT:

Advancing Climate Resilience through Climate-Smart Infrastructure Investments and Implementation Guidance for the Disaster Resiliency Planning Act

NATIONAL CLIMATE RESILIENCE FRAMEWORK

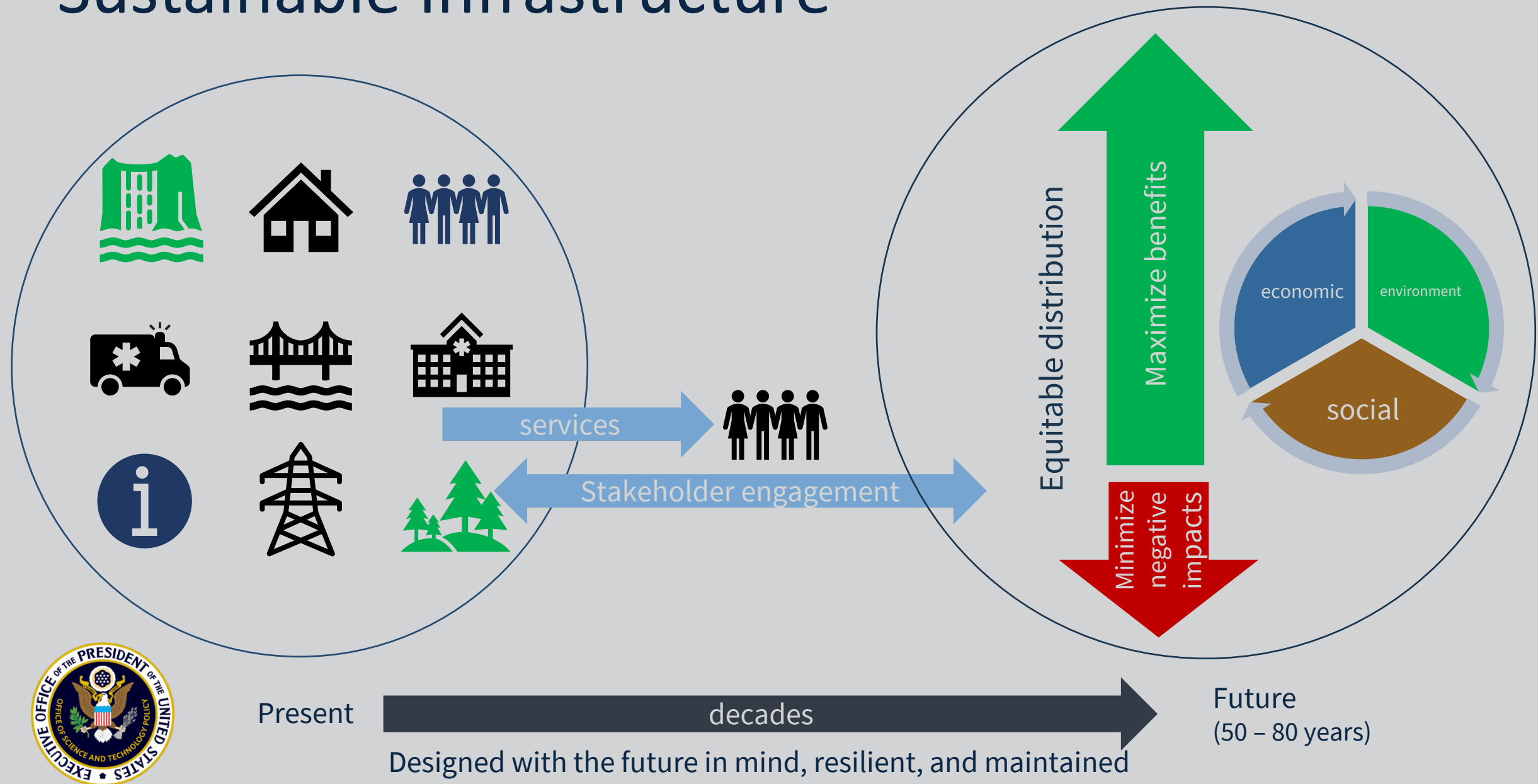
SEPTEMBER 2023



THE WHITE HOUSE
WASHINGTON



Sustainable Infrastructure



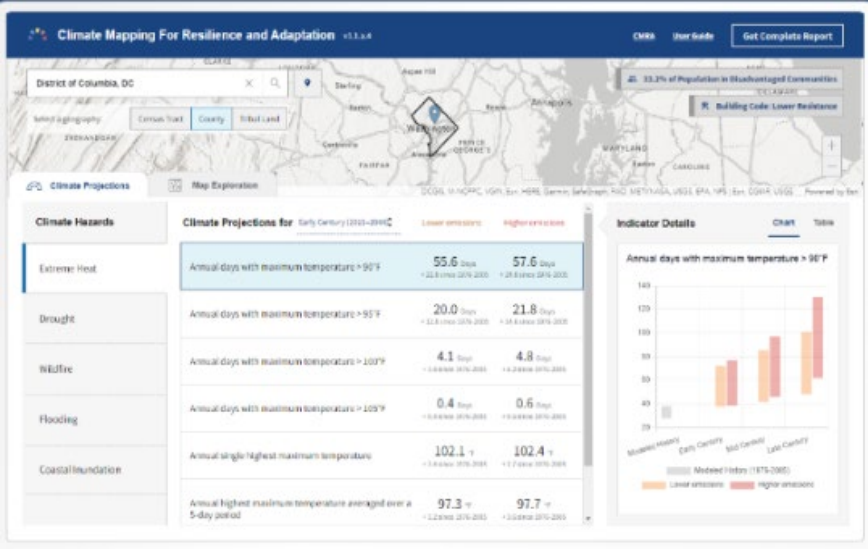


FIFTH NATIONAL CLIMATE ASSESSMENT

nca2023.globalchange.gov



Climate Mapping for Resilience and Adaptation (CMRA)



American Society of Civil Engineers– NOAA Task Force



	Climate Stressors			
	Temperature Extremes	Intense Rainfall	Straight-line Wind	Coastal Hazards
Civil Engineering Practice	Temperature impacts design variables related to materials, soils, hydrology, and system behavior	Rainfall intensity, duration and frequency are used in determining flood levels, structural loads, and in designing surface drainage	Wind speed is a primary design variable for determining structural loads	Sea level and lake level change, intensity frequency and extent of coastal storms, pacific wave climate, seasonal ice, and coral reef dynamics each influence flood characteristics

FUNDING

Bipartisan Infrastructure Law

\$454 billion in funding for over 56,000 specific projects and awards, across over 4,500 communities in all 50 states.

Inflation Reduction Act

Largest-ever investment in clean energy and climate action.

Tax credits save families up to 30% off home energy technologies like heat pumps, rooftop solar, and energy efficiency improvements



ENGAGEMENT

Navigating a plethora of federal funding and information sources



Supporting applicants for federal funds



Bipartisan Infrastructure Law Technical Assistance Guide
A list of federal resources to help communities deliver infrastructure projects.

Building bridges between the climate science and infrastructure communities



A. JAMES CLARK
SCHOOL OF ENGINEERING



TAMMY WEST
KEEP IT TOGETHER
(2021, *site-specific installation*)

