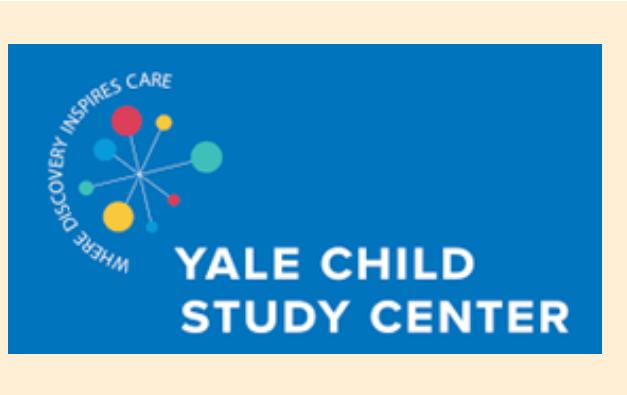


***Understanding the
Challenges:
Nature of
Environmental,
Health and Economic
Equity Challenges
Facing Underserved
Communities***



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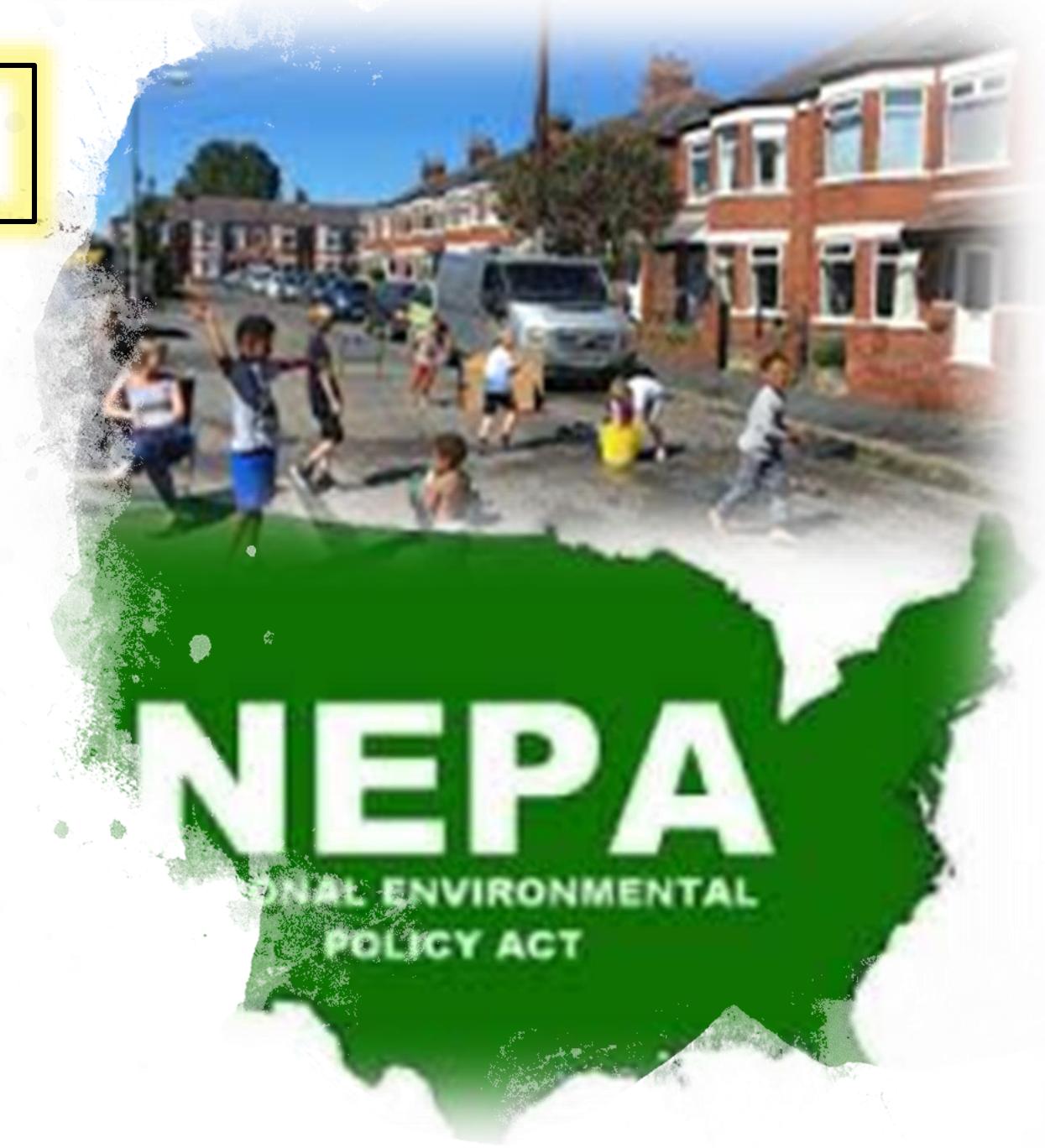
National Environmental Justice
Conference
June 21, 21

Street Map for Presentation

Introduction

Message: Advance equity through NEPA by addressing basic needs and safety of underserved individuals/communities for full range of government decisions affecting environment and human environment

Punch Line: NEPA practitioners have huge opportunity and responsibility to intensify consideration of underserved populations through NEPA framework in government decision-making for controversial and transactional federal actions



Street Map for Presentation

Part One: Understanding Challenges of Underserved Communities (15 minutes)

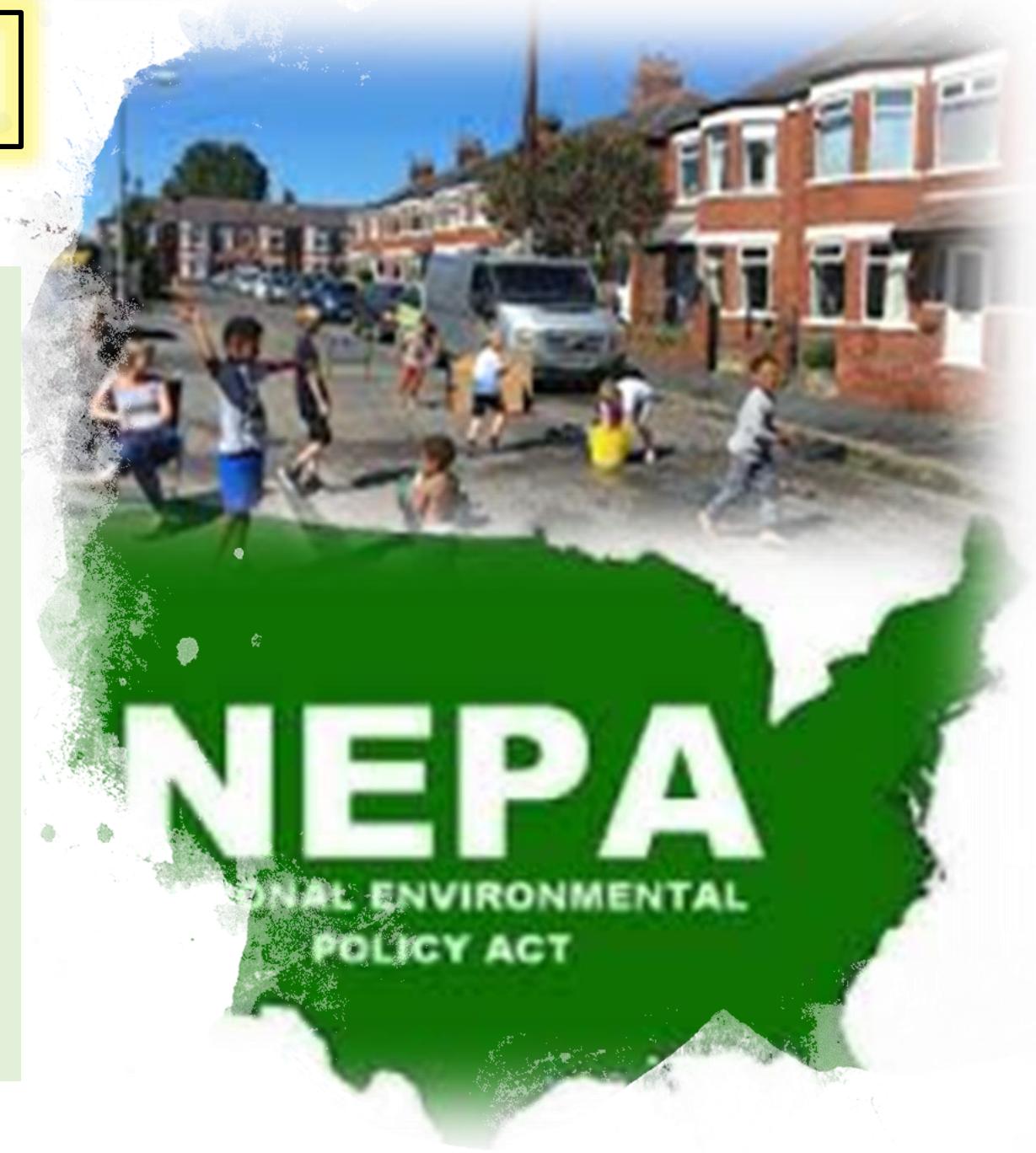
Learning Objective: Increase understanding of basic needs and safety relevant to NEPA and Equity

- Human face of inequities
- EJ Concerns
- Basic Needs & Safety
- Examples

Part Two: Applying NEPA to Overcome Challenges (10 minutes)

Learning Objective: Increase application of NEPA framework to basic needs and safety for underserved communities

- Promising Practices
- Practice Tips



Part One

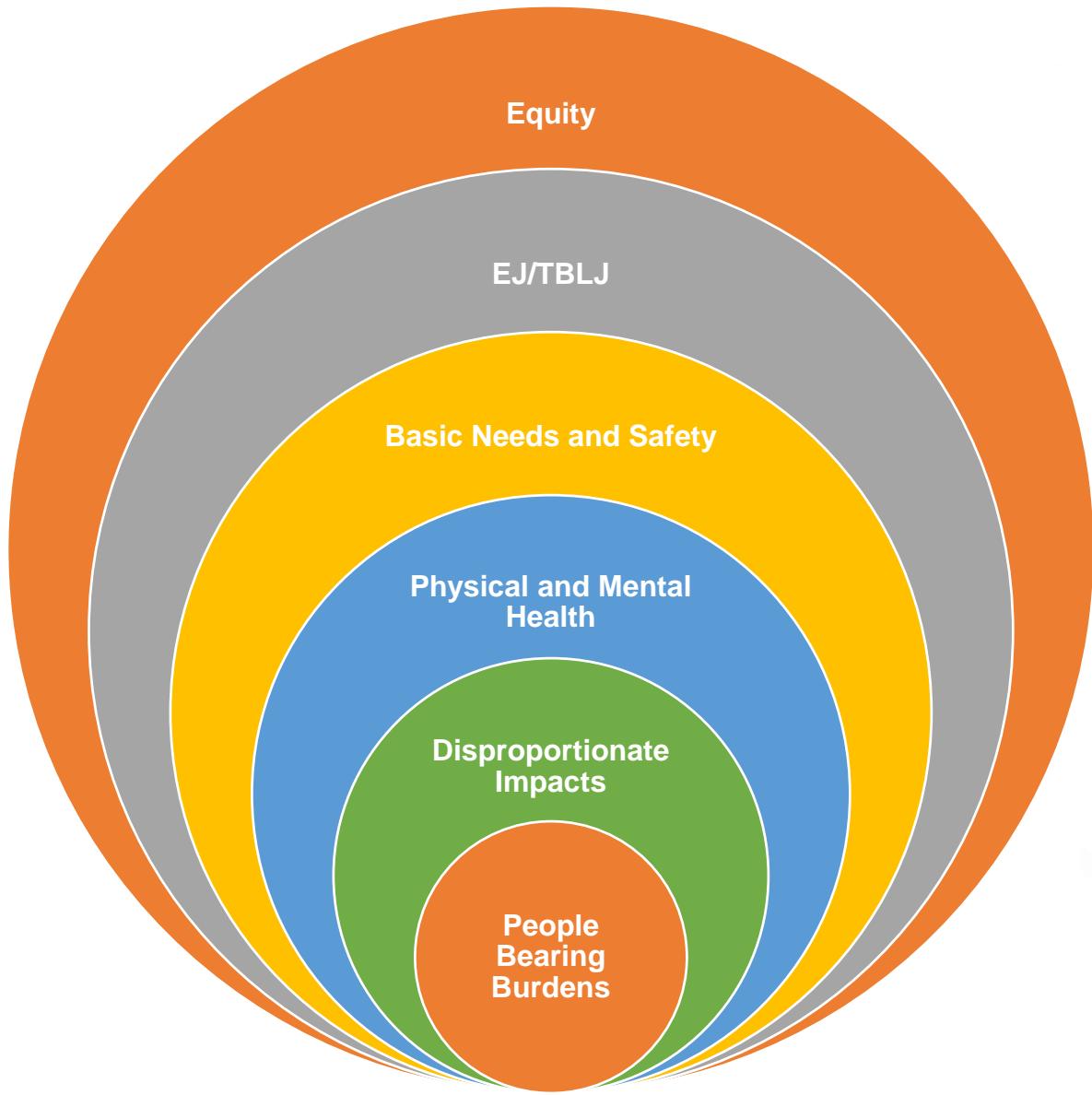
Understanding Challenges of Underserved Communities

Learning Objective: Increase understanding of basic needs and safety relevant to NEPA and Equity

- Human face of inequities
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NEPA & Equity



Disproportionate Impact Data on Physical Health: Asthma

BIPOC experience high incidence of asthma and related acute/ chronic physical/behavioral health outcomes

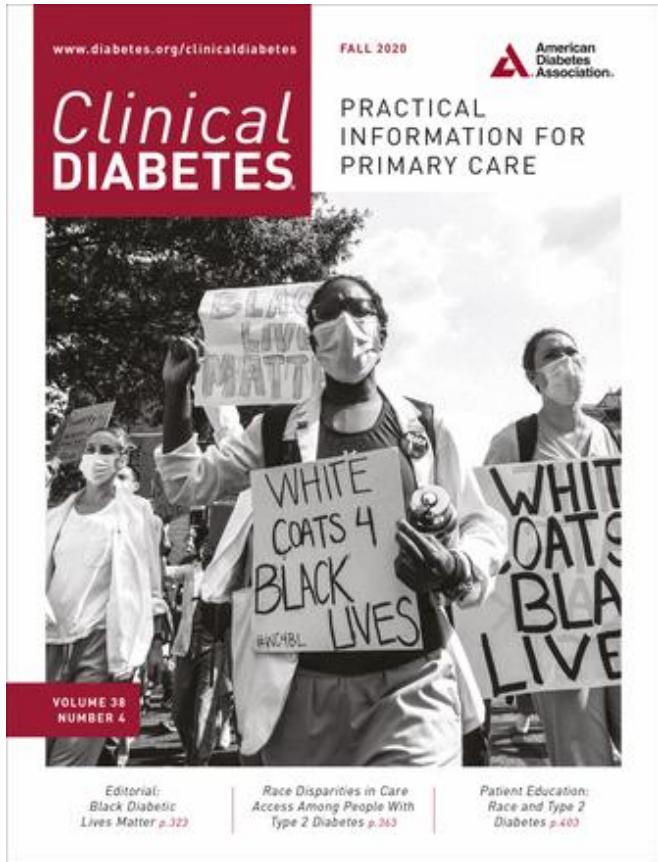
Non-Hispanic Blacks

- 40 percent more likely to have asthma than non-Hispanic whites
- nearly three times more likely to die from asthma related causes than non-Hispanic white people

Non-Hispanic black children

- death rate eight times that of non-Hispanic white children.
- 5 times more likely to be admitted to the hospital for asthma than non-Hispanic white children





Disproportionate Impact Data on Physical Health

Diabetes: Non-Hispanic Blacks compared to non-Hispanic whites

- 60 percent more likely to be diagnosed with diabetes
- twice as likely to die from diabetes
- 3.2 times more likely to be diagnosed with end stage renal disease
- 2.3 times more likely to be hospitalized for lower limb amputations

Outcomes of Diabetes Care for Blacks*

Measure	Most Recent Disparity	Disparity Change
Admissions for uncontrolled diabetes without complications per 100,000 population, age 18 and over	Worse	No Change
Admissions with diabetes with short-term complications per 100,000 population, age 18 and over	Worse	Narrowing
Admissions with diabetes with short-term complications per 100,000 population, ages 6-17	Worse	No Change
Admissions with diabetes with long-term complications per 100,000 population, age 18 and over	Worse	No Change
Adjusted incident rates of end stage renal disease (ESRD) due to diabetes per million population	Worse	Narrowing

* Source: US HHS Agency for Healthcare Research and Quality (AHRQ)

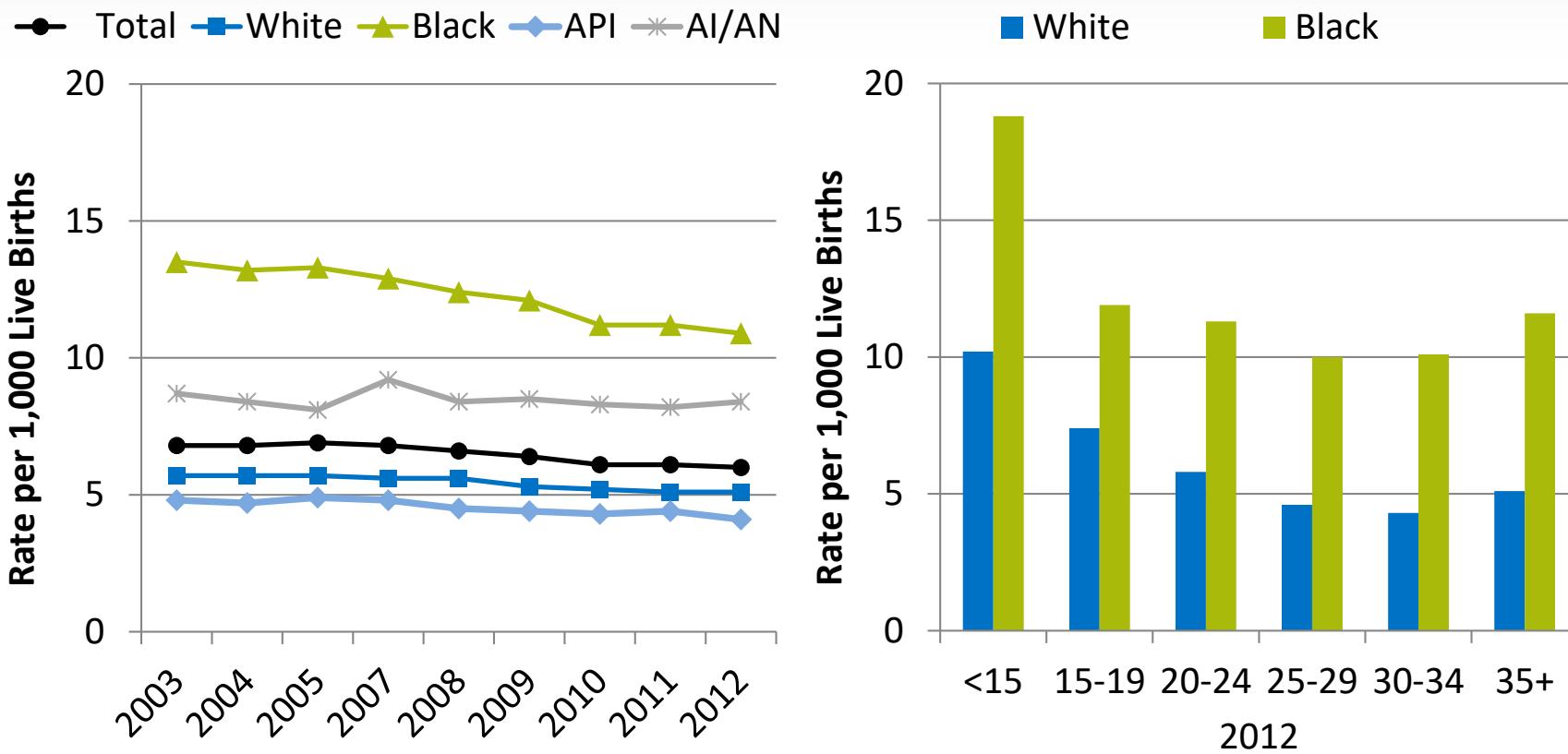
Disproportionate Impact Data on Physical Health

Maternal and Child Health

- Infant mortality rate for blacks is twice rate for white infants
- Black mothers are three times as likely to die from childbirth as white mothers
- Poor air quality associated with poor maternal health outcomes e.g., low birthweight, gestational diabetes mellitus, gestational hypertension and preeclampsia
- Women exposed to air pollution have higher rates of preterm birth and stillbirth
 - risk of stillbirth twice as high for Black mothers as for white mothers
- Farmworkers suffer high rate of pesticide-related illnesses each year, particularly among children and pregnant women



Infant mortality per 1,000 live births, all birth weights, by race, 2003-2012, and stratified by mother's age, Blacks and Whites, 2012



Key: API = Asian or Pacific Islander; AI/AN = American Indian or Alaska Native.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System – Linked Birth/Infant Death Data Set, 2003-2012.

Denominator: Live births.



Disproportionate Impact Data on Mental Health

Climate risk factors have negative impact on mental health

- extreme heat, air pollution, flooding, and hurricanes

Air pollution connecting to preterm birth/stillbirth key risk factor for postpartum depression

- 38% of women of color have postpartum depression compared to 13-19% for all postpartum women

Poverty level affects mental health status

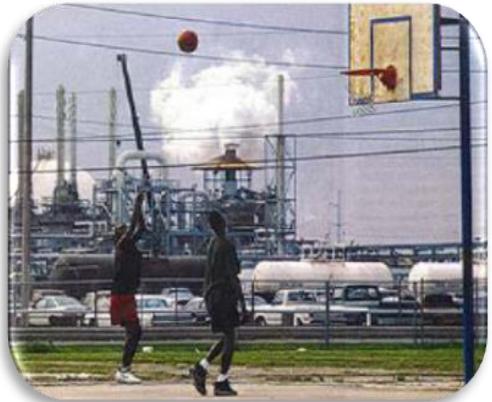
- Black or African Americans living below poverty level are twice as likely to report serious psychological distress compared to those over twice poverty level

Environmental Justice Concerns Relevant to NEPA

Pollution Burden		Population Characteristics			
Exposures	Environmental Effects	Sensitive Populations	Socioeconomic Factors		
 Ozone	 PM2.5	 Solid Waste Sites and Facilities	 Cleanup Sites	 Asthma	
 Diesel Particulate Matter	 Drinking Water Contaminants	 Groundwater Threats	 Impaired Water Bodies	 Educational Attainment	 Housing Burden
 Toxic Releases from Facilities	 Traffic		 Cardiovascular Disease	 Linguistic Isolation	
			 Jobs		

Disproportionate Impact Factors Relevant to NEPA

Proximity and Exposure



Cumulative Impacts



Physical Infrastructure



Susceptible Populations



Unique Exposure Pathways



Participating in Decision Making



Freeze Frame

Deep Dive :

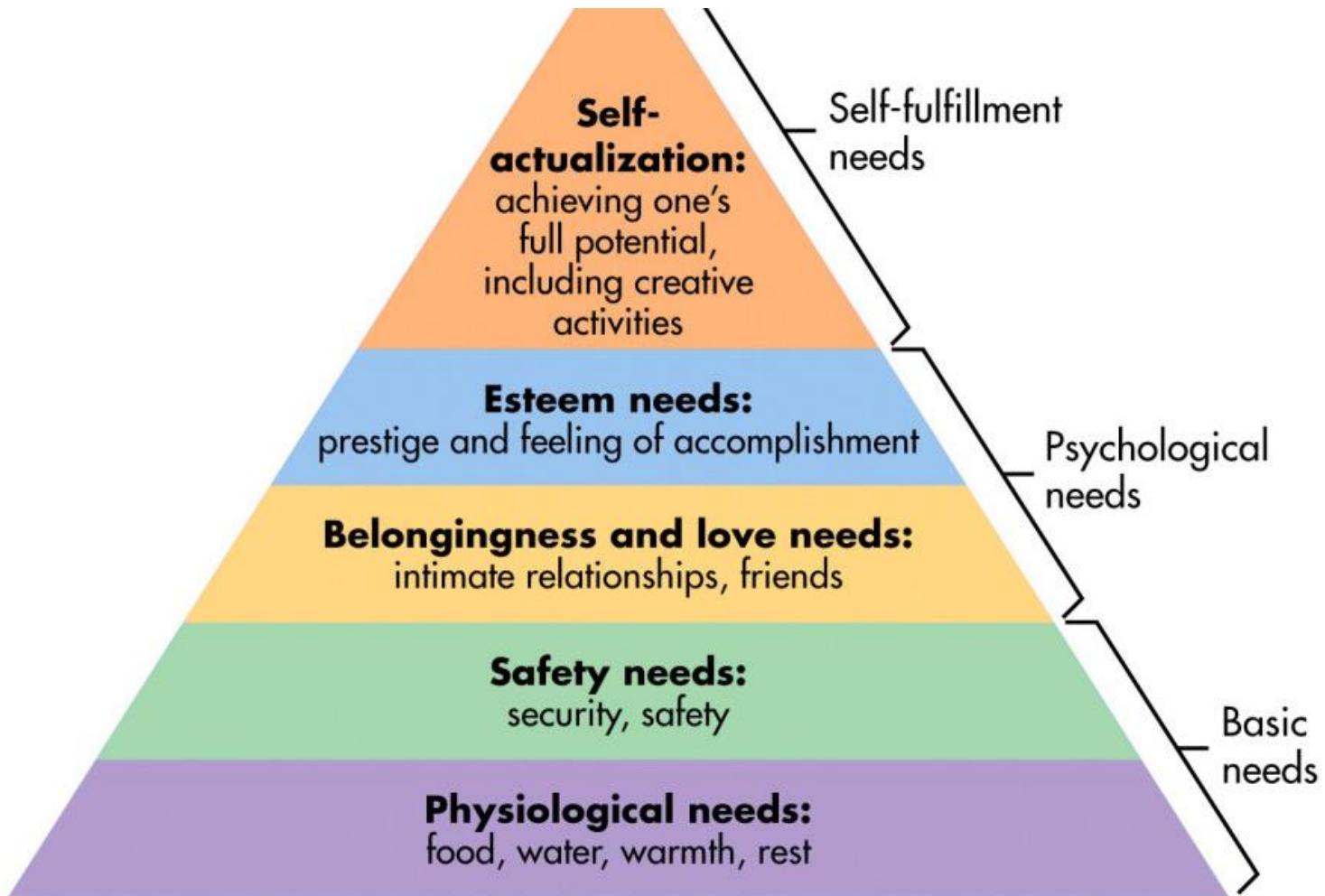
Social Determinants of Health

Social determinants of health

- conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks
- grouped into 5 domains

Social Determinants of Health





Freeze Frame Deep Dive: Maslow's Hierarchy of Needs

Basic Needs: Health Care



HRSA
Health Resources & Services Administration

OMB No.: 0915-0324 Expiration Date: 05/31/2019

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Health Resources and Services Administration

FOR HRSA USE ONLY	
Grant Number	Application Tracking Number

ENVIRONMENTAL INFORMATION AND DOCUMENTATION (EID)

This Environmental Information and Documentation (EID) checklist consists of information that the agency is required to obtain to comply with the National Environmental Policy Act of 1969 (NEPA). NEPA establishes the Federal government's national policy for protection of the environment. HRSA has developed the EID for applicants of funding that would potentially impact the environment and to ensure that their decision-making processes are consistent with NEPA. Applicants must provide information and requested on the EID checklist so that HRSA may ensure compliance with NEPA.

HRSA will provide applicants with the results of the agency's environmental review through the Notice of Award (NoA). If HRSA determines that additional environmental compliance is necessary, HRSA will notify applicable grantees of specific requirements.

Relationship to Racial Equity and Justice: Community Health Centers serve disadvantaged and underserved populations

- More than 91% of health center patients are individuals or families living at or below 200% of the Federal Poverty Guidelines
- More than 60% are racial or ethnic minorities
- 1 in 5 people are living in rural communities

American Rescue Plan Act (ARPA) Funding: Federally Qualified Health Centers (FQHCs) received funding to expand health centers' operational capacity during pandemic and beyond. U.S. Health Resources and Services Administration (HRSA) allocated **\$\$7.6B**

ARPA Goals: community health centers should address:

- Equitable access to COVID-19 vaccination, testing, and treatment
- Other current and anticipated COVID-19 and primary health care needs in the service area
- Population and social determinants of health that may impact access to care, contribute to poor health outcomes, and exacerbate health disparities

Basic Needs: Climate Change and Energy Efficiency & Weatherization

The Benefits of a Weatherized Home

- ENERGY COSTS SAVINGS
- WATER COST SAVINGS
- LESS OUT-OF-POCKET HEALTH COSTS
- LOWER LOAN INTEREST PAYMENTS

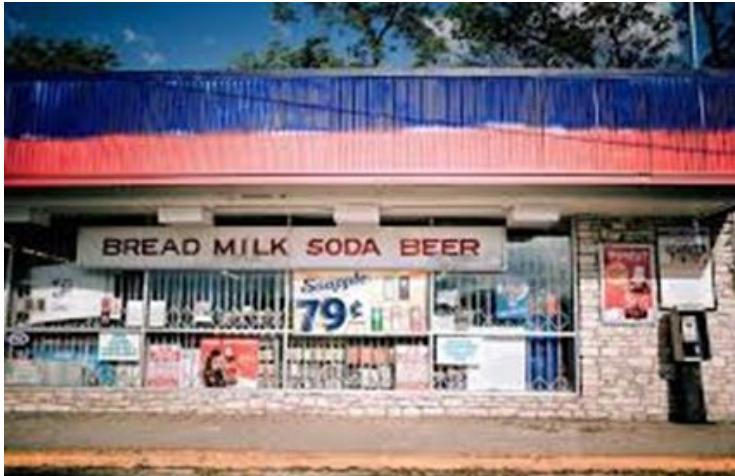
U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

NEPA Overview for the Weatherization Assistance Program

1 | Weatherization Assistance Program

eere.energy.gov

Basic Needs: Food Security





60.7%

A majority of mothers screened positive for housing insecurity



65.3%

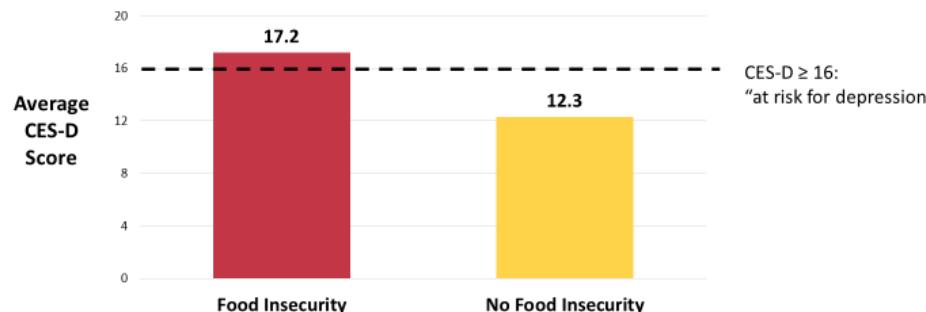
And more screened positive for food insecurity



15



Mothers are significantly more likely to have increased depression symptoms if they experience food insecurity



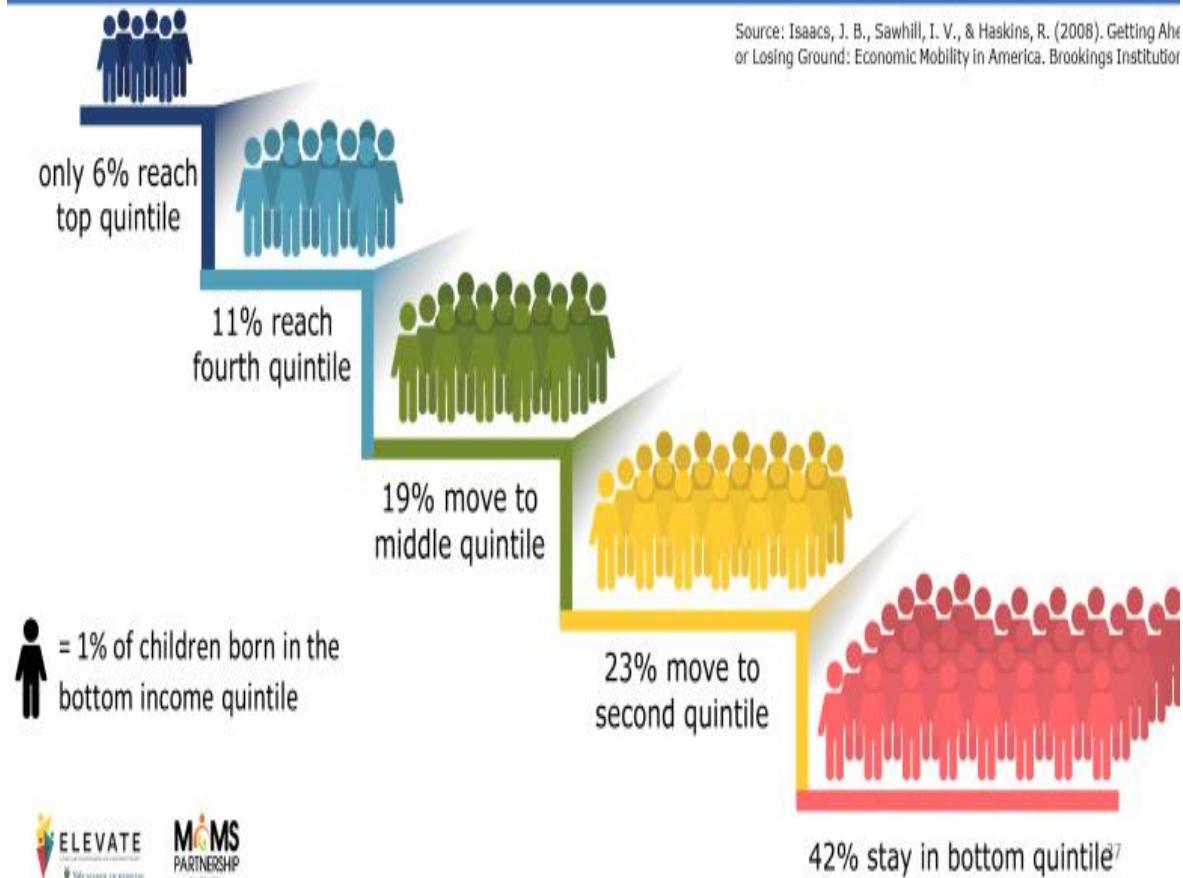
16

Visualizing Equity Through NEPA

Mobility in America



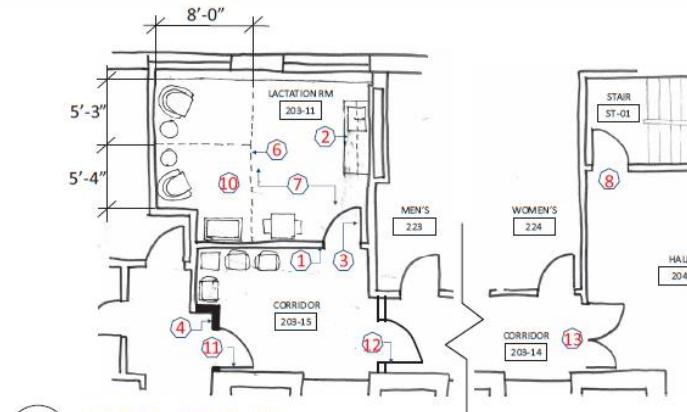
Source: Isaacs, J. B., Sawhill, I. V., & Haskins, R. (2008). Getting Ahead or Losing Ground: Economic Mobility in America. Brookings Institution



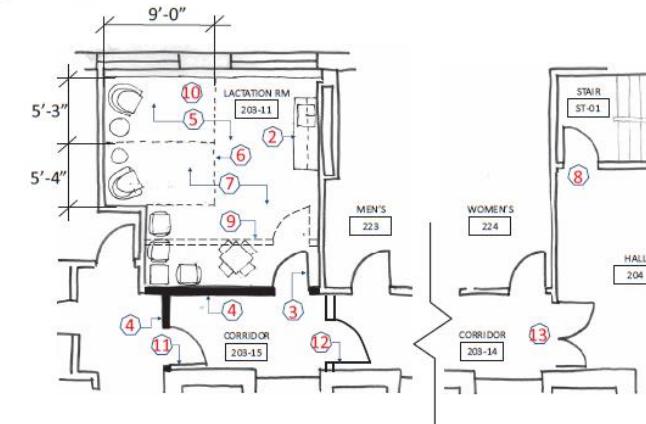
19

New Haven MOMS Partnership and Breast-Feeding Task Force

Architecture + Art



1 LAYOUT - STANDARD
SCALE: $\frac{1}{4}''=1'-0''$



2 LAYOUT - ALTERNATIVE
SCALE: $\frac{1}{4}''=1'-0''$

ROOM LAYOUT & ALTERNATIVE LAYOUT
UNION STATION – LACTATION ROOM

Part Two

Applying NEPA to Overcome Challenges

Learning Objective: Increase application of NEPA framework to basic needs and safety for underserved communities

- Biden Administration Commitment to Equity
- Promising Practices & Practice Tips

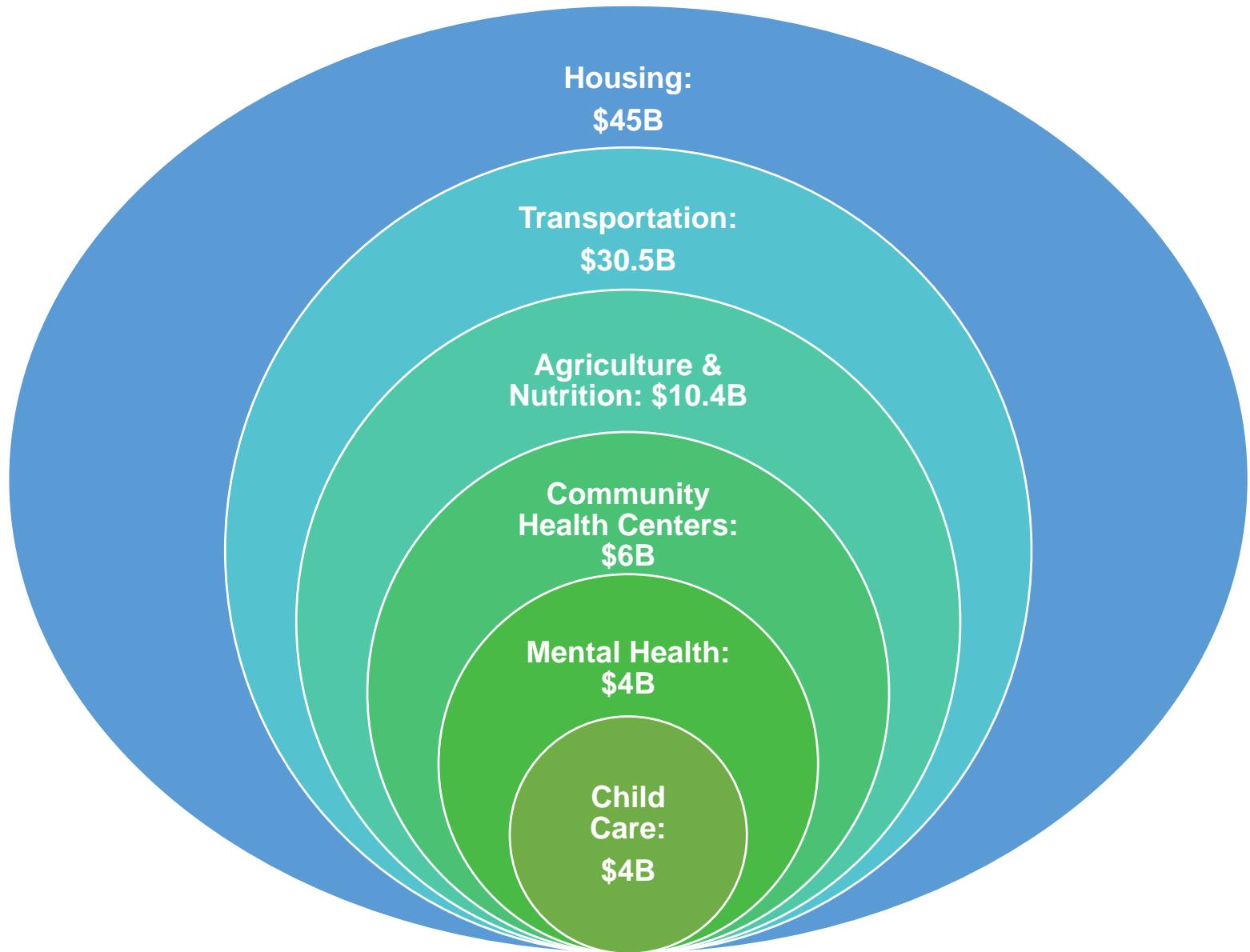




American Rescue Plan Act of 2021

**Whole of
Government
Solutions: ARPA
Funding for Basic
Needs and Safety**

Where is NEPA???



Beneficiaries of NEPA & Equity: People United by a Particular Characteristic

Equity: consistent and systematic fair, just, and impartial treatment of all individuals who belong to underserved communities denied such treatment

- Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color;
- members of religious minorities;
- lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons;
- persons with disabilities; persons who live in rural areas;
- persons otherwise adversely affected by persistent poverty or inequality.

Underserved Communities: populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of “equity.”

EO 13985: Definitions

Beneficiaries of NEPA & Equity: People United by a Particular Condition

(g) **Effects** or *impacts* means changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.

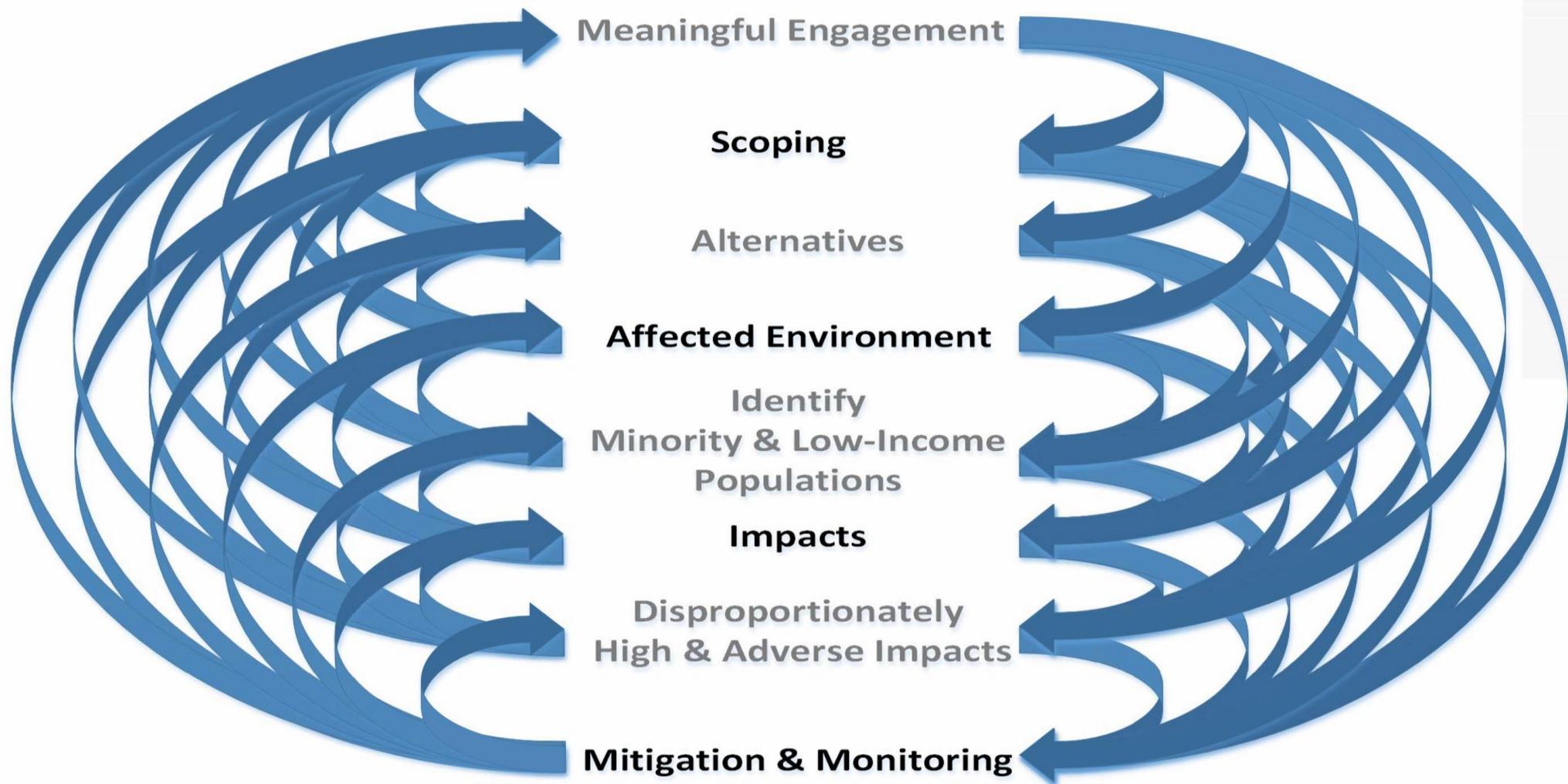
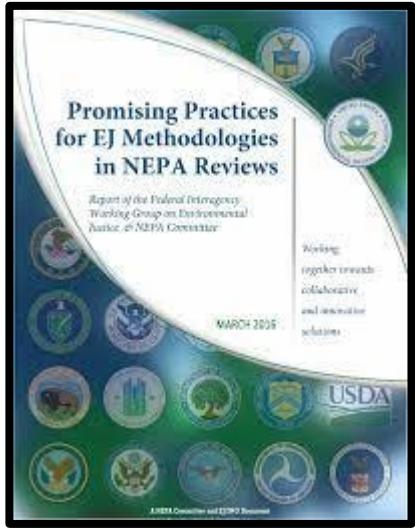
- (1) Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic (such as the effects on employment), social, or health effects. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

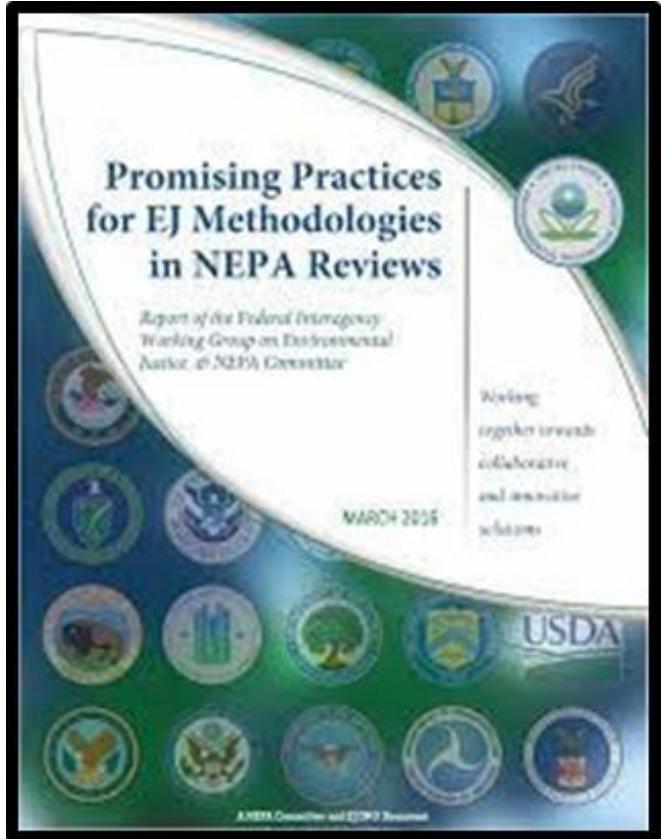
Federal Actions Subject to NEPA:

Where is Equity???

- Federal construction projects
- Adoption of Federal programs
- Plans to manage Federal lands and resources
- Federal funding of state, local, and private projects
- Federal approval of grants, licenses, leases and permits

Promising Practices for EJ Methodologies in NEPA Reviews





Promising Practices Tips: Defining Affected Environment

Focus: Consider how community's conditions, characteristics, location can influence boundaries

Conditions: ecological, aesthetic, historic, cultural, economic, social, or health

- human health vulnerabilities (e.g., heightened disease susceptibility, health disparities)
- socioeconomic vulnerabilities (e.g., reliance on resource that may be affected by proposed action, disruptions to community mobility and access as a result of infrastructure development)
- cultural vulnerabilities (e.g., traditional cultural properties and ceremonies, fish consumption)

Location:

- exposure pathways (routes by which the minority or low-income population may come into contact with chemical, biological, physical, or radiological effects), including multiple exposures
- ecological, aesthetic, historic, cultural, economic, social, or health consequences to the community
- distribution of adverse and beneficial impacts from proposed action

Modifications: extent of the affected environment may be

- larger (or smaller)
- differently shaped than boundaries without existence of conditions
- may also not be contiguous.

Promising Practice Tips: Impacts

Potential vulnerabilities from low-probability, high-impact events

- lack of infrastructure and resources to address unanticipated impacts
- inability to evacuate or relocate
- lack of access to health care
- and reliance on affected natural and cultural resources

Factors related impact's intensity from a proposed project

- health and safety of the community
- community's unique geographic characteristics, including proximity to cultural resources
- degree to which the action may establish a precedent for future actions with significant effects
- loss of significant cultural or historical resources

Unique susceptibility to impacts from a proposed project

- special vulnerabilities, e.g. pre-existing health conditions that exceed norms among the general population
- unique routes of exposure, e.g. use of surface or well water in rural communities
- cultural practices, e.g. subsistence fishing, hunting or gathering, access to sacred sites

Promising Practice Tips: Disproportionately High and Adverse Impacts

DHAI factors that amplify identified impacts

- unique exposure pathways
- prior exposures
- social determinants of health

Environmental stressor sources that may cause adverse health effects

- number of environmentally-regulated facilities within a community
- proximity of regulated facilities
- quality of the air, water, and other environmental media;
- Existing health conditions such as percent of infant mortality, average birth weight, adult mortality, life expectancy at birth, and life span (e.g., age groups, healthy versus vulnerable populations)

Promising Practice Tips: Mitigation



Five Mitigation Methods for Each Potential Impact



Avoiding impact by not taking a certain action or parts of action.



Minimizing impact by limiting degree or magnitude of action and its implementation.



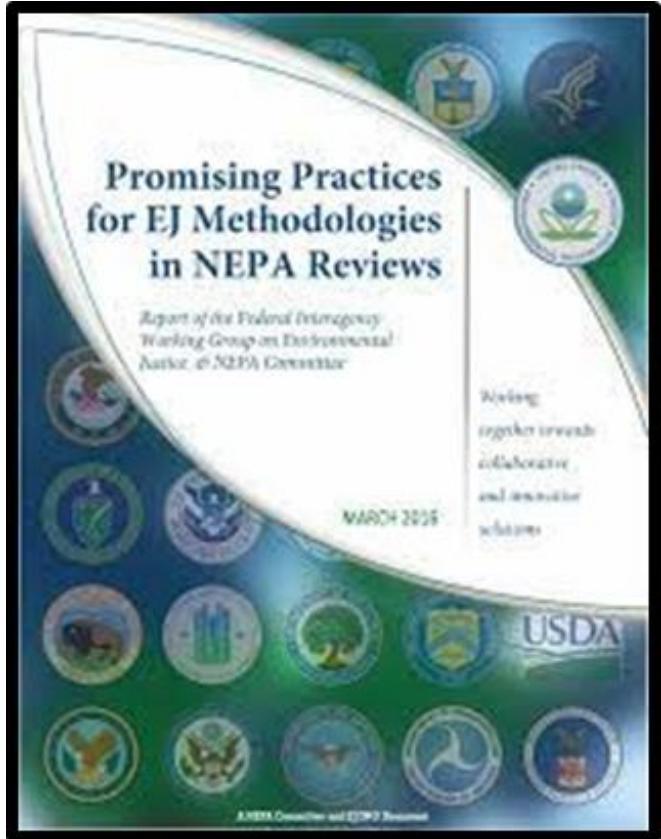
Rectifying an impact by repairing, rehabilitating, or restoring affected environment.



Reducing or eliminating an impact's frequency over time(e.g. preservation and maintenance operations during the life of the action.)



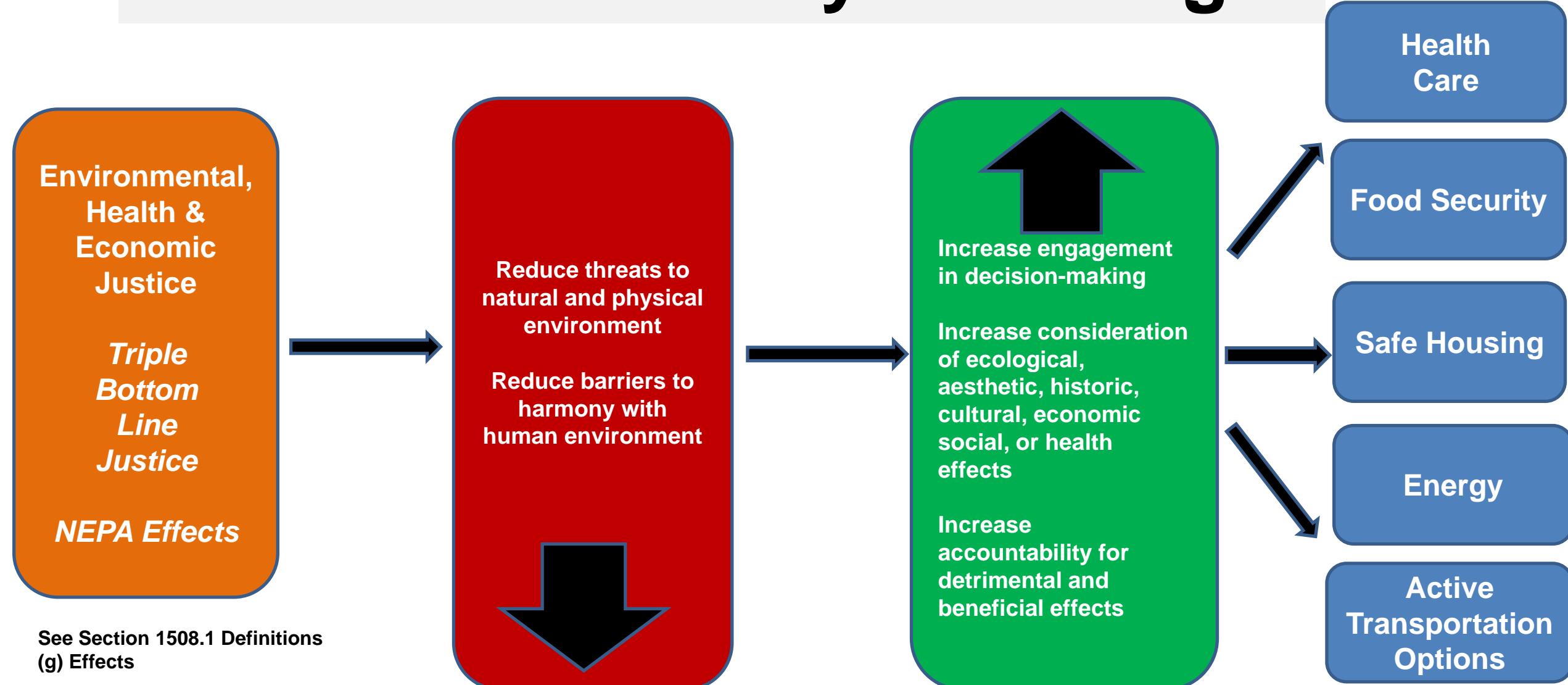
Compensating for an impact by replacing or providing substitute resources or environments



Promising Practices Tips: Mitigation

- Unique characteristics and conditions of minority populations and low-income populations in affected environment may require adaptive and innovative mitigation measures to sufficiently address specific circumstances and impacts
 - evaluate mitigation measures even if project will have benefits to minority populations and low-income populations
 - include as conditions in associated permits and licenses or in federal assistance grants and agreements

NEPA & EJ Theory of Change



Thank you!

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