

Class 14 - HIA Applications



Agenda

- Welcome back
- EIA
- HIA
- Updates from site visits
- Assignments and feedback

NEPA

- National Environmental Policy Act (NEPA) issued in 1973: “When we speak of the environment, basically, we are talking about the relationship between man and these physical and biological and social forces that impact upon him”
- Established by the President’s Council on Environmental Quality (CEQ)
- Any major federal, state, or local project that spends federal funding, is performed by federal government, or requires permits issued by a federal agency

NEPA's EA Process

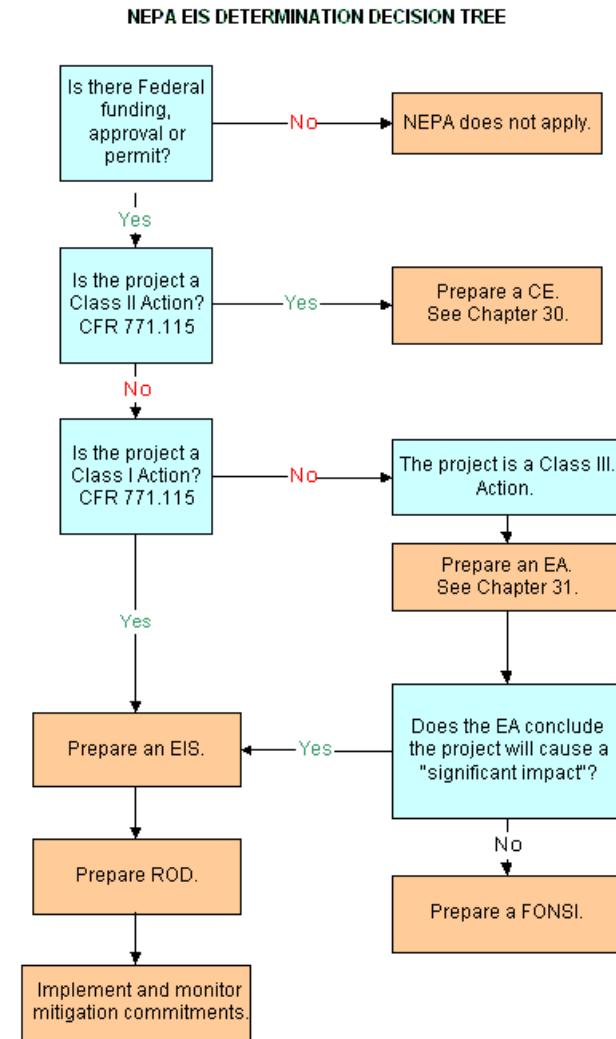


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Human Health Impacts in EIA

- Eos 12898 (EJ) and 13045 (protection of children from environmental health and safety risks)
- Six mentions of health in NEPA

EO 12898 and 13045

- Environmental justice – directive to identify and address disproportionate and adverse human health or environmental effects
- Use public health data, involve public health agencies
- Consider health effects

NEPA process- how health gets in

- Substantive public concerns are addressed in the DEIS
- Definition of significance includes “the degree to which effects on the human environment are likely to be highly controversial”
- “Effects” includes ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative”

NEPA's EA Process

- Notice of intent and scoping
- Draft EIS
 - Public comment
 - Explain purpose and need
 - Assess 'no build scenario'
- Final EIS
- Record of Decision
 - Provisions are not binding

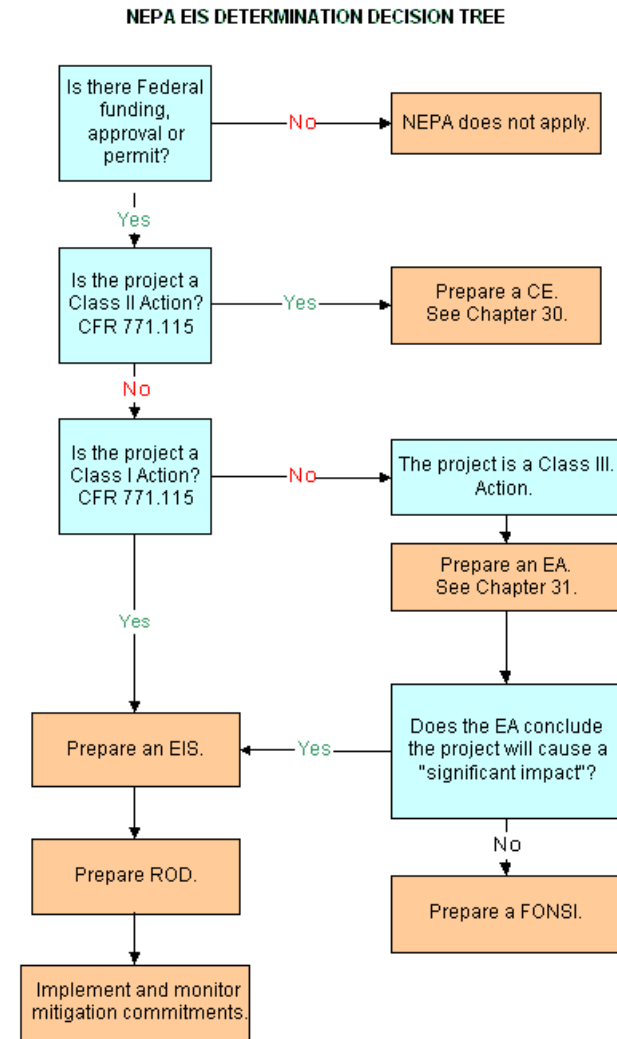


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EIA experiences?

Social Impact Assessment

- 1970s
- Orientation, not methodology
- Has most frequently been wrapped into the EIA process
- Can be a standalone assessment

HIA minimum elements

- Three iterations, hundreds of public comments

Images removed due to copyright restrictions. Please see North American HIA Practice Standards Working Group (Bhatia R, Branscomb J, Farhang L, Lee M, Orenstein M, Richardson M). “[Minimum Elements and Practice Standards for Health Impact Assessment, Version 2.](#)” (PDF – 3MB) North American HIA Practice Standards Working Group. Oakland, CA: November 2010.

Impact assessment

EIS SIA HIA ...

- Scoping
- Data collection
- Prediction (assessment)
- Recommendations to minimize harm and maximize benefits
- Look at overlapping focal areas

Other assessment types

- ESHIA – integrated assessment
- SEA – strategic environmental assessment
- HHRA – human health risk assessment
- OHRA – occupational health risk assessment

More things HIA is not

- Epidemiologic study
- Program evaluation
- Cost-benefit analysis



Do we need all of this?

Synergies

Proposed transportation project

EIA – how is the project expected to change levels of various air pollutants

HIA – how do changes in air pollutants affect health

Example: Healthy T for a Healthy Region

PROJECTED 2012 MBTA DEFECIT: **\$161 MILLION**
 YEARLY HEALTH COST: **\$272.1 MILLION / \$386.9 MILLION**

  COST OF
 ADDITIONAL
 TIME IN TRAFFIC
\$137.5 MILLION
\$186.0 MILLION

COST OF
 ADDITIONAL
 MORTALITY 
 AND HOSPITALIZATIONS
 DUE TO AIR
 POLLUTION*
\$1.5 MILLION
\$2.1 MILLION

 COST OF
 ADDITIONAL
 FUEL BURNED
\$22.7 MILLION
\$31.8 MILLION

**PROPOSED
 FARE INCREASE
 AND SERVICE
 REDUCTION
 SCENARIOS:**

SCENARIO ONE
 FARES WOULD
 INCREASE BY **43%**
 AND SERVICE
 REDUCTIONS
 WOULD AFFECT
 BETWEEN **38-48**
MILLION
 TRIPS PER YEAR

SCENARIO TWO
 FARES WOULD
 INCREASE BY **35%**
 AND SERVICE
 REDUCTIONS
 WOULD AFFECT
 BETWEEN **53-64**
MILLION
 TRIPS PER YEAR

  COST OF LIVES
 LOST DUE TO
 DECREASED
 PHYSICAL ACTIVITY
\$74.9 MILLION
\$116.5 MILLION

COST OF 
 ADDITIONAL
 CAR CRASHES,
 INCLUDING
 CRASHES WITH
 BICYCLES AND
 PEDESTRIANS
\$33.6 MILLION
\$48.8 MILLION

 COST OF
 CARBON EMISSIONS
\$1.9 MILLION
\$1.7 MILLION

Please visit “[A Healthy T for a Healthy Region](#)” to view the entire report presentation.

*FOR ASTHMA, CHRONIC LUNG DISEASE, HEART ATTACKS, HEART DISEASE, AND MAJOR CARDIOVASCULAR EVENTS

Was this an HIA?

Development without Displacement

RESISTING GENTRIFICATION IN THE BAY AREA

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- Should this have been an HIA?

Pick a 'model HIA'

- Critique by April 12
- www.hiasociety.org – SOPHIA website

- Site visits
- Assessment workshops
 - Where are you stuck?
 - What do you need help with?
 - What is your analytic plan?

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11.S941 Healthy Cities: Assessing Health Impacts of Policies and Plans
Spring 2016

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