

*HEALTH IMPACT ASSESSMENT AND
TRANSPORTATION DECISION-
MAKING: ENVIRONMENTAL NEXUS*

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National Association of Environmental Professionals (NAEP)

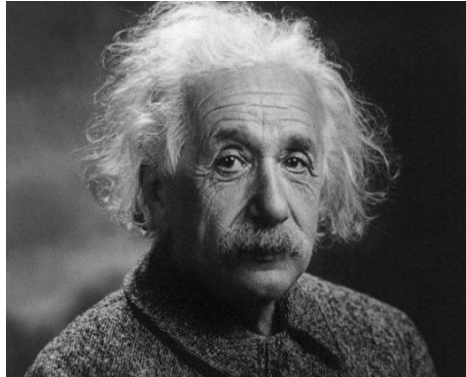
The logo for the NAEP is a globe, Planet Earth, but simultaneously the flame red of the Sun, the Wave representing the dynamics of change, the seasons, of Man's actions and impact.



NAEP



Mission & Vision



Intelligence & Imagination



Dedication



Multidisciplinary



Code of Ethics



Best Practices



T-PH Link



Photos Source: <http://www.myphilanthropedia.org/blog/2011/10/>

Environmental Partnership

What is NEPA???

- National Environmental Policy Act of 1969
 - Provides decision-makers with information gained through an Environmental Assessment (EA) or Environmental Impact Statement (EIS) on potential known and unknown impacts of a proposed federally funded project including:
 - Environmental
 - Sociopolitical
 - Economic
 - Emphasis on public involvement
 - Requires an impact evaluation on a range of possible alternatives





Photo Source: <http://www.healthimpactproject.org/project/opportunities/2011-call-for-proposals>

Health Impacts

Inspector Clouseau-Style Accountability: Health Impacts in NEPA Practice

- Noise and Vibration – Threshold Criteria
- Air Quality (CO, NO_x, SO₂, VOCs, PM_{2.5})
 - ▣ Clean Air Act
 - ▣ US EPA Standards
- Water Quality
 - ▣ Clean Water Act
 - ▣ Water Pollution Control Act
 - ▣ Safe Drinking Water Act



Health Impacts in NEPA Practice Continued...

- Risk Exposure
 - ▣ Hazardous/Special Waste (CERCLA, RCRA)
 - ▣ Electromagnetic Effects - Intensity/Duration
- Construction Impacts - All of the Above
- Health Risk Assessment for Chemicals
 - ▣ Lead
 - ▣ Asbestos
 - ▣ PCBs
- Causal-link of diesel exhaust
 - ▣ Respiratory Disease (i.e. asthma)
 - ▣ Cardiovascular Disease



Transportation Options & Environmental Justice

Adverse Effects

- ❑ Air and water pollution
- ❑ Soil contamination
- ❑ Destruction/disruption of man-made and/or environmental resources
- ❑ Adverse impacts on community cohesion or economic vitality
- ❑ Noise and vibration
- ❑ Effects on property values

Benefits

- ❑ Decrease in travel time
- ❑ Improved air quality
- ❑ Expanded employment opportunities
- ❑ Better access to transit options
- ❑ Improved quality of transit service
- ❑ Increased property values

Advancing Social Equity Through NEPA



- Executive Order 12898 of 1994: Environmental Justice (EJ)
 - ▣ Focus on minority and lower income populations
 - ▣ Community Outreach
 - ▣ Disproportionately High and Adverse Impacts
 - ▣ Equity in Investment
- Presidential Memorandum: Follow-up
 - ▣ Directs federal agencies to include EJ in existing laws such as NEPA
- Title VI, Civil Rights Act of 1964
 - ▣ Prohibits discrimination based upon race, color, national origin, disability, sex, and age

Promoting Health Benefits Through NEPA

- Transit-oriented development
 - ▣ Improved access
 - ▣ Multi-modal options
 - Bicycling
 - Walking
 - Riding
- Place-based community spaces
 - ▣ Sense of place
 - ▣ Improved quality of life
- Restoring/preserving historic and cultural heritage
 - ▣ National Historic Preservation Act (Section 106)
 - ▣ USDOT Act of 1966 (Section 4(f))



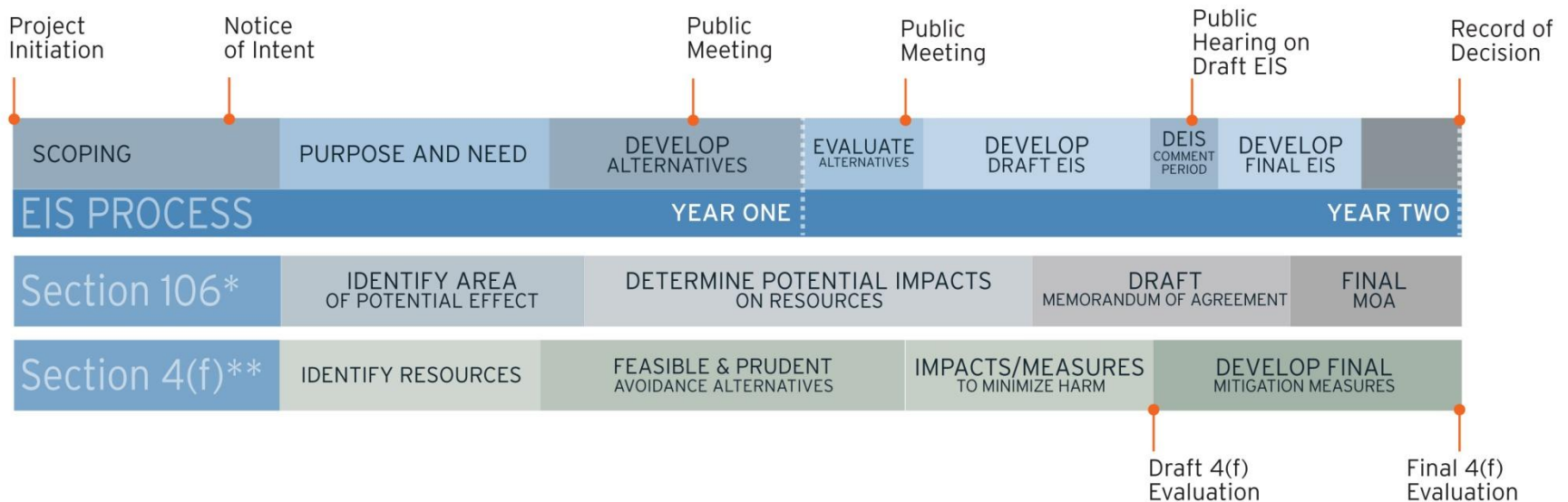
Steps in HIA & EIA



Health Impact Assessment	Environmental Impact Assessment
1. Screening	1. Initiating Project
2. Scoping	2. Scoping
3. Assessing Risks & Benefits	3. Developing Alternatives and Assessing Environmental Impacts
4. Recommending Changes to Mitigate Health Effects	4. Recommending Measures to Mitigate Impacts
5. Reporting	5. Preparing Environmental Assessment or Environmental Impact Assessment
6. Evaluating HIA Effects	6. Finding of No Significant Impact (FONSI) or Record of Decision (ROD)

NEPA Process: Public Involvement

National Environmental Policy Act (NEPA) EIS Process Timeline



Notes:

- * Section 106 includes formal consultation with consulting parties throughout process.
 - ** Section 4(f) can be expedited via de minimis procedures if minimal impact to resource.
- Timelines for all processes can be shortened, depending on complexity of project issues.

Graphic Source: Ronald Deverman, HNTB Corporation



US EPA Initiatives

- On-line Assessment Tools
 - ▣ EJ View
 - ▣ EJ Screen
 - ▣ NEPAssist
 - ▣ Eco-Health Relationship Browser
- Plan EJ 2014
 - ▣ Cross-Cutting Strategies – EJ and Children’s Health
- Kenneth Olden
 - ▣ New Director of EPA’s National Center for Environmental Assessment
 - ▣ Former Director of National Institute of Environmental Health Sciences and National Toxicology Program



Transportation Research Board: Health Considerations in Transportation Decision-Making

- Public Health and Transportation Policy Linkages
- Health Costs of Transportation Investment
- Community-Based Research – Highways and Health Relationships
- Place-making and Healthy Communities
- Transportation Planning and the HIA





Photo Source: Lorin Dangle

Thank You!