# A Cross-Disciplinary Approach to Integrating Health into the Transportation Infrastructure Design & Development Process

*A Shift in Culture…*

## Learning Objective:

This session will describe the practical application of health as a component of the transportation infrastructure design and planning process.

## MODERATOR

Karyn M. Warsow, MS, MPH, DrPH(c)
Founder & Principal, Transportation-Public Health Link
4947 Hallenius Road
Gaylord, Michigan 49735
(231) 546-3462
kwarsow@transpotohealthlink.com

## SPEAKER 1

**Health Impacts and Transportation Decision-Making: Environmental Nexus**

Ronald Deverman, MA
Associate Vice President, Environmental Planning
HNTB Corporation
111 N. Canal Street, Suite 1250
Chicago, Illinois 60606
(312) 798-0221
rdeverman@hntb.com

Brief Presentation Summary:
The National Environmental Policy Act (NEPA) is the regulatory process that guides the evaluation and disclosure of potential environmental impacts of a proposed action on humans and the environment. This is especially true for transportation infrastructure actions that use federal money or require federal permits; projects such as new highways, passenger rail lines, major bridges and airports. Traditional social, economic, and environmental analyses include assessments of noise, air quality and potential exposure to special or hazardous waste. In addition, livability, community culture, neighborhood cohesion, and public place-making have been important considerations during the assessment of the impacts and benefits of new transportation projects. The inclusion of social determinants of health has resulted in both transportation and environmental planners identifying the linkages between public health and good transportation decisions. Looking at transportation challenges with new eyes, we can realize a more significant role in modifying professional perspectives. This presentation will provide an explanation of the NEPA process as a vital step in transportation infrastructure planning and design process by considering potential health impacts.

## SPEAKER 2

*Interactive Presentation: Cultural Competency*

**Project Communications: Reaching New Audiences with New Tools**

Darrel W. Cole
Assistant Vice President
Manager, Communications & Public Involvement Group
Parsons Brinckerhoff
444 South Flower, Suite 800
Los Angeles, CA 90071
225-223-8233
Coled@pbworld.com

Brief Presentation Summary:

Transportation planning is an important first step in the development of a proposed infrastructure project or system of projects and services. This requires effective collaboration and communication between transportation planners and engineers with governmental entities and community leaders to shape the built environment. The planning and evaluation process involves a transdisciplinary approach that considers the sociopolitical, environmental and economic impacts of sustainability. Through the use of quantitative and qualitative analyses and proactive public engagement, the positive and negative impacts of a project can be determined. This presentation will focus on the active role of transportation planning to improve health and quality of life in a community through the appropriateness of an infrastructure projects, facility design, land use, safety, and mitigation of environmental impacts, performance metrics and enhanced mobility of motorized and non-motorized options needed to meet the demands of a growing population.

## SPEAKER 3

**Sustainable Return on Investment: The Economic, Social, and Environmental Elements of a Transportation Infrastructure Project**

Pamela Yonkin, MA
Senior Economist, HDR Decision Economics
695 Atlantic Avenue, 2nd Floor
Boston, MA 02111
(617) 357-7724
pamela.yonkin@hdrinc.com

Brief Presentation Summary:

The success of the US economy is dependent on the efficiency, flexibility, security and safety of its transportation infrastructure. This involves the merger of transportation modalities, just-in-time manufacturing and information technologies to move goods, services and information between businesses and customers. But how is this measured? Sustainable Return on Investment (SROI) is a cost-benefit model that describes a process through which non-cash, external costs and benefits of a transportation facility are calculated and presented in monetary terms. The goal of SROI is to provide decision-makers with a standardized process to prioritize projects that demonstrate long-term sustainable return on investment. Quantifying and monetizing the sociopolitical, environmental and economic impacts of a proposed transportation investment provides vital information regarding value-for-money comparisons among different modes and different geographic regions. This presentation will review the SROI model as a business case for the design and construction of a proposed transportation infrastructure project by assigning monetary worth to the direct, indirect and non-cash costs and benefits as well as the value of societal consequences that are generally overlooked in an economic assessment.

## SPEAKER 4

*Interactive Presentation: Puzzle Activity*

**Transportation Financing & Community Sustainability: Pulling the Pieces Together**

Stephen F. Mayer, PhD, PE
Business Development Manager & Strategic Liaison
Parsons Corporation, Parsons Transportation Group
9 Victoria Heights
East Aurora, New York 14052
(716) 864-1761
stephen.mayer@parsons.com

The initial capital investment and concerns over future funding to support the construction, operation and maintenance of the nation's transportation infrastructure has become an important issue affecting community sociopolitical, environmental and economic sustainability. Public private partnerships (P3) offer an innovative funding and delivery mechanism. P3 arrangements are popular in many countries throughout the world to develop, finance, and operate virtually all classes of utility, transportation, and building infrastructure. The P3 model offers an alternative to state and local governments unable to invest the initial capital of a proposed transportation project due to decreasing tax revenues. In most P3 arrangements, the infrastructure is built to fulfill a public demand, but financed and operated under a concession agreement through private interests. The risk elements of project development such as cost overruns and delays in the construction schedule are transferred to the private party. The benefit is that communities that have had to delay or forego needed transportation improvements are now able to move forward since there is limited dependency on public funding. This presentation will describe and explain how a P3 arrangement facilitates stakeholder decision-making and community cohesion.