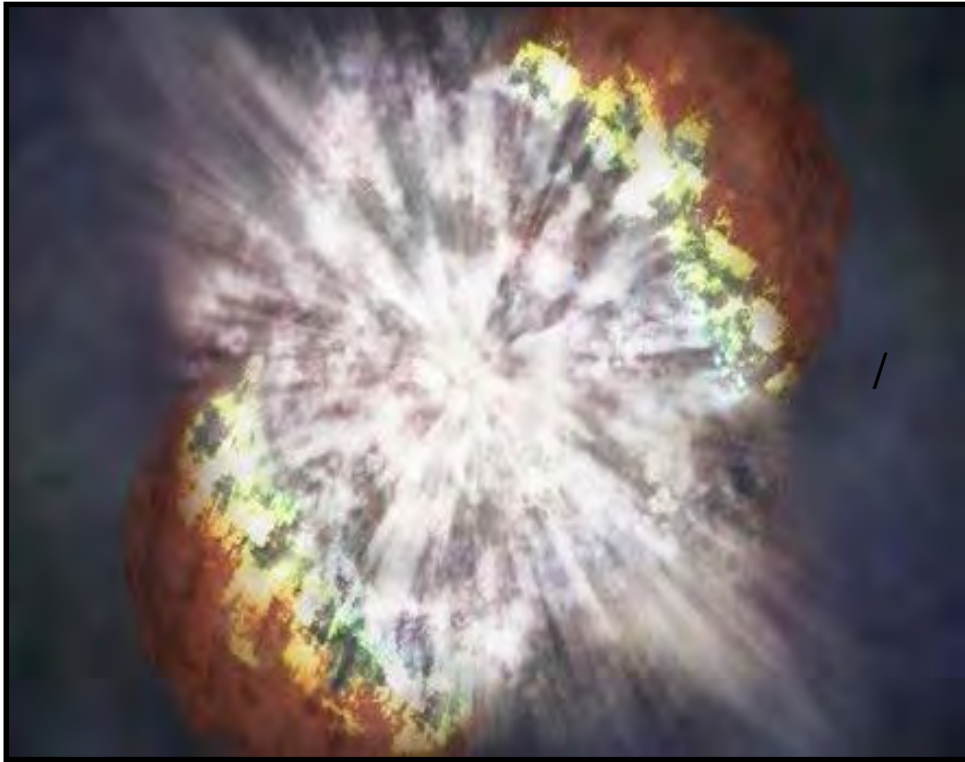


Health and Transportation

Where are we? – What is going on?



Ed Christopher
FHWA Resource Center
Planning Team
708-283-3534
Ed.Christopher@dot.gov
edc@edthefed.com



<http://www.indianampo.com/>

Why Public Health & Transportation?

Why is USDOT, FHWA, FTA or NHTSA interested?

DOT is the steward of the transportation system

The transportation system can promote healthy lifestyles



Aristotelian

Transportation systems have the potential to significantly impact the health of their users, both positively and negatively. As the steward of the Nation's transportation system, USDOT plays a key role in mitigating the negative health impacts of transportation and maximizing the positive influences through programs that protect the environment, improve air quality, reduce the prevalence and severity of crashes, and provides options for mode choice. Moreover, FHWA and FTA, for example, oversee a transportation planning process that ensures safe, equitable, and efficient access to vital services for all users of the transportation system.

What do we mean--Health & Transportation?

TRANSPORTATION

- Air Pollution
- Motor Veh Crashes
- Urban Form
- Noise
- Water Quality
- Bike/Ped Injuries
- Climate Change
- Mental Health
- EJ
- Access to Stuff
- Social Capital

PUBLIC HEALTH

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity

Public Health is the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals

<http://www.who.int/en/>

Social Capital (Quality of Life)

The individual and communal time and energy that is available for such things as community improvement, social networking, civic engagement, personal recreation, and other activities that create social bonds between individuals and groups. Circumstances that prevent or limit the availability of social capital for a community and its members can have a negative effect on the health and well-being of the members of that community. These negative effects on health and well-being can in turn have negative effects on the community as a whole.



<http://www.cdc.gov/healthyplaces/terminology.htm#p>

Health Origins at FHWA

Sept 2011 Health in Transportation: a Review of Current FHWA Practice (internal report done by Volpe)

Jan 2012 HinT Working group formed (12 FHWA Offices)

Dec 2012 HinT expanded to FTA, NHTSA and OST

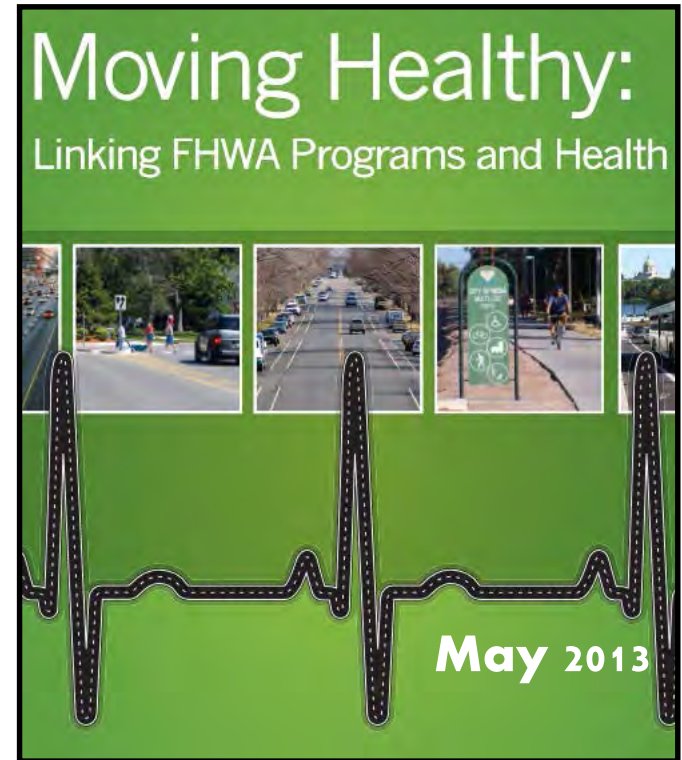
Working Definition for HinT

The provision of safe and reliable mobility and access influences, and is influenced by, health. The objectives of the Working Group are to (1) identify and recognize aspects of existing FHWA programs that relate to health and (2) build awareness of these programs and their impacts with FHWA leadership, staff, and stakeholders.

HinT Highlights

Early Accomplishments

This document provides information on FHWA programs, initiatives, tools, and resources that influence or are influenced by health. Although FHWA does not have a single, specific program that focuses solely on health, it is implicit in a broad range of existing programs



http://www.fhwa.dot.gov/planning/health_in_transportation/resources/moving_healthy.cfm

HinT Highlights Continued



Health in Transportation

FHWA → Planning

Health in Transportation

Welcome to the Federal Highway Administration's (FHWA) Health and Transportation webpage. This webpage is designed to be a comprehensive resource on the linkages between transportation and health.

Linking health and transportation brings together transportation professionals and health practitioners in a collaborative process to improve transportation decisions. Working together, we are committed to developing transportation options that promote and improve access to healthy and active lifestyles.

USDOT is committed to promoting better consideration of health outcomes in transportation. Our work is focused on the following objectives:

- Promote safety,
- Improve air quality,
- Respect the natural environment through Context Sensitive Solutions,
- Improve social equity by improving access to jobs, health care and other community services,
- Create additional opportunities for the positive effects of walking, biking, public transportation, and ride- and vehicle-sharing,
- Conduct research on transportation's role in improving quality of life.

USDOT looks forward to collaborating with our stakeholders to build transportation options that support safe, accessible, and healthy communities.

Recent Updates

- [Health in Transportation Working Group: 2014 Annual Report \(4/17/15\)](#)

Contacts

For more information, please contact:

- Frederick Bowers
- Tameka Macon
- Victoria Martinez
- Aung Gye
- Jill Stark
- Ed Christopher, Resource Center
- Faith Hall, FTA

A Website

- Working Group
- FAQs
- Resources
- Annotated Links

http://www.fhwa.dot.gov/planning/health_in_transportation

Current HinT Activities

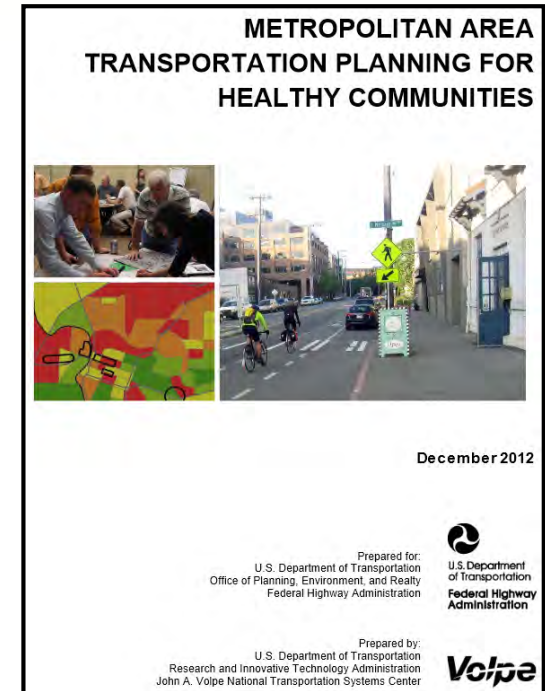
- **Coordination/Information Sharing, Internal MailList**
- **Annotated Bibliography**
- **Advanced and Detailed FAQs**
- ❖ **Planning for Healthy Communities White Papers (Metro and State)**
- ❖ **Framework for Incorporating Health in the Transportation Corridor Planning Process**
- ❖ **Meetings with CDC**

White Papers ~ Metro Area Report

**Describes some
Frameworks/typologies for
MPO involvement**

**Presents 4 in depth case
studies** (Nashville, PSRC, SACOG, SANDAG)

**Discusses the context
(key players, Data and
Tools, Regulatory/Programmatic Setting,
and Funding Sources**



http://www.planning.dot.gov/documents/Volpe_FHWA_MPOHealth_12122012.pdf

For me the Metro area report is a...

Intro to Transportation Planning and its Process with a focus on Health

	Who Develops?	Who Approves?	Time Horizon	Content	Update Requirements
UPWP	MPO	MPO	1 or 2 Years	Planning Studies and Tasks	Annually
MTP	MPO	MPO	20 Years	Future Goals, Strategies, and Projects	Every 5 Years 4 years for nonattainment and maintenance areas
TIP	MPO	MPO/ Governor	4 Years	Transportation Investments	Every 4 Years
LRSTP	State DOT	State DOT	20 Years	Future Goals, Strategies, and Projects	Not Specified
STIP	State DOT	US DOT	4 Years	Transportation Investments	Every 4 Years

“Metropolitan area planning products and requirements can be vessels to formalize or communicate health considerations”

Key documents in metropolitan and statewide transportation planning processes. Source: FHWA/FTA TPCB Briefing Book

But it does bring Health in with specifics...

Table 2 Incorporation of Health into the Transportation Planning Process by Case Study MPOs

MPO Name	Regional Vision and Goals	Development of Transportation Plan	Development of S/TIP	Monitor System Performance
Nashville Area MPO	Light Blue	Medium Blue	Dark Blue	Medium Blue
PSRC	Dark Blue	Medium Blue	Light Blue	Medium Blue
SACOG	Medium Blue	Medium Blue	Medium Blue	Medium Blue
SANDAG	Medium Blue	Medium Blue	Light Blue	Light Blue

Darker colors signify greater progression in activity

Nashville Travel Survey Health Questions

Since the Report was done

- **Daily time spent sitting on a typical weekday**
- **Daily time spent sitting on a specific weekday (last Wednesday)**
- **Overall level of physical activity**
- **Overall level of health**
- **Overall diet health**
- **Height and weight**

http://www.nashvillempo.org/docs/research/Nashville_Final_Report_062513.pdf

White Papers ~ State DOT Report

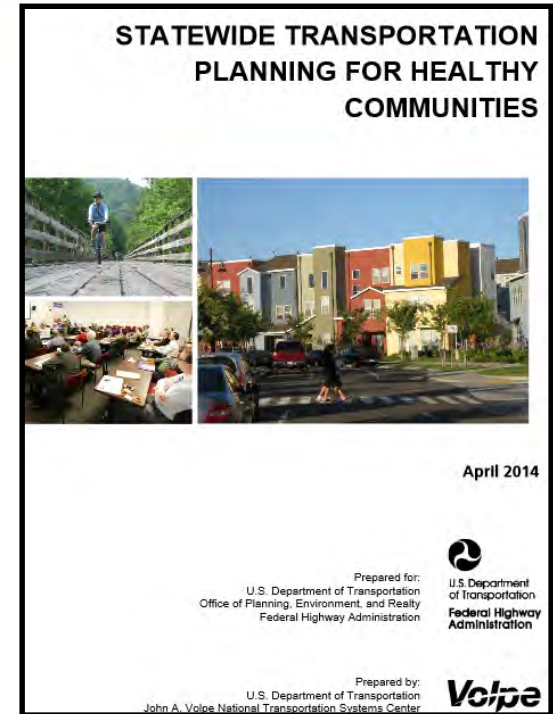
California DOT (Caltrans)

Iowa DOT (IADOT)

Massachusetts DOT (MassDOT)

Minnesota DOT (MnDOT)

North Carolina DOT (NCDOT)



https://www.fhwa.dot.gov/planning/health_in_transportation/resources/statewide_healthy_communities/hep14032.pdf

State DOT Report

Activity	Caltrans	Iowa DOT	MassDOT	MnDOT	NCDOT	Highlight
Executive Health Initiative	X	x				The governor's public-private Healthiest State Initiative seeks to make Iowa the healthiest State in the country by 2016.
Legislative Requirements			x			The Massachusetts legislature established the inter-agency Healthy Transportation Compact (HTC) and directed MassDOT to work with private, State, and Federal partners as part of the "establishment of a healthy transportation policy."
Complementary State Goals (e.g., Sustainability, Serving Seniors, etc.)	X	x	x	x	x	Interest in and responsibility for health at Caltrans spans many priorities and initiatives such as active transportation, reduced air pollution, reduced greenhouse gas emissions, Complete Streets implementation, highway safety improvement planning, and SRTS.
DOT - State Health Agency Partnership	X	x	x	x	x	MnDOT regularly works with the MDH in coordinating activities, whether it is promoting walking and bicycling, providing input for MnDOT's visioning effort, or identifying ways to expand technical assistance to MDH grantees that are responsible for transportation activities.
Formal, Broad Multi-Agency Health Partnership	X		x		x	Caltrans actively participates in the Health in All Policies Task Force, a group established in February 2010 under State Executive Order S-04-10 , to coordinate State agency activities that promote health and sustainability goals in California.
Research and Partnerships with Academic Institutions	X			x	x	MnDOT partnered with the University of Minnesota on a study and survey to explore the relationship between quality of life and transportation in Minnesota. These results spurred agency discussions about how to address health in transportation activities.
SRTS - Health Coordination	X	x	x	x	x	An Iowa DOT grant in Northeast Iowa funded an SRTS liaison to coordinate between the rural planning organization, local municipalities, and a key local health partner on promoting rural youth health through physical activity.
Assistance to Local Partners Incorporating Health into Transportation Planning	X	x	x	x	x	NCDOT supports rural and metropolitan planning organizations seeking to include health as a planning goal through activities such as the 2012 workshop that outlined a strategy for considering health in rural/metropolitan planning documents.

Framework for....

Incorporating Public Health in the Transportation Corridor Planning Process (\$400K)

Public Health & Transportation Corridor Planning Framework



2013 to Mid 2016

ICF is contractor

Incorporated into Plan Works (formerly TCAP)

https://www.fhwa.dot.gov/planning/health_in_transportation/research_efforts/

Where is the Framework Today?

Being Beta Tested (2014-2015)

- **Akron Metro Regional Transit Authority (METRO)**
- **Central Oklahoma Transportation and Parking Authority (EMBARK)**
- **Delaware Valley Regional Planning Commission (DVRPC)**
- **East Central Wisconsin Regional Planning Commission (ECWRPC)**
- **Tennessee Department of Transportation (TDOT)**

Framework for....

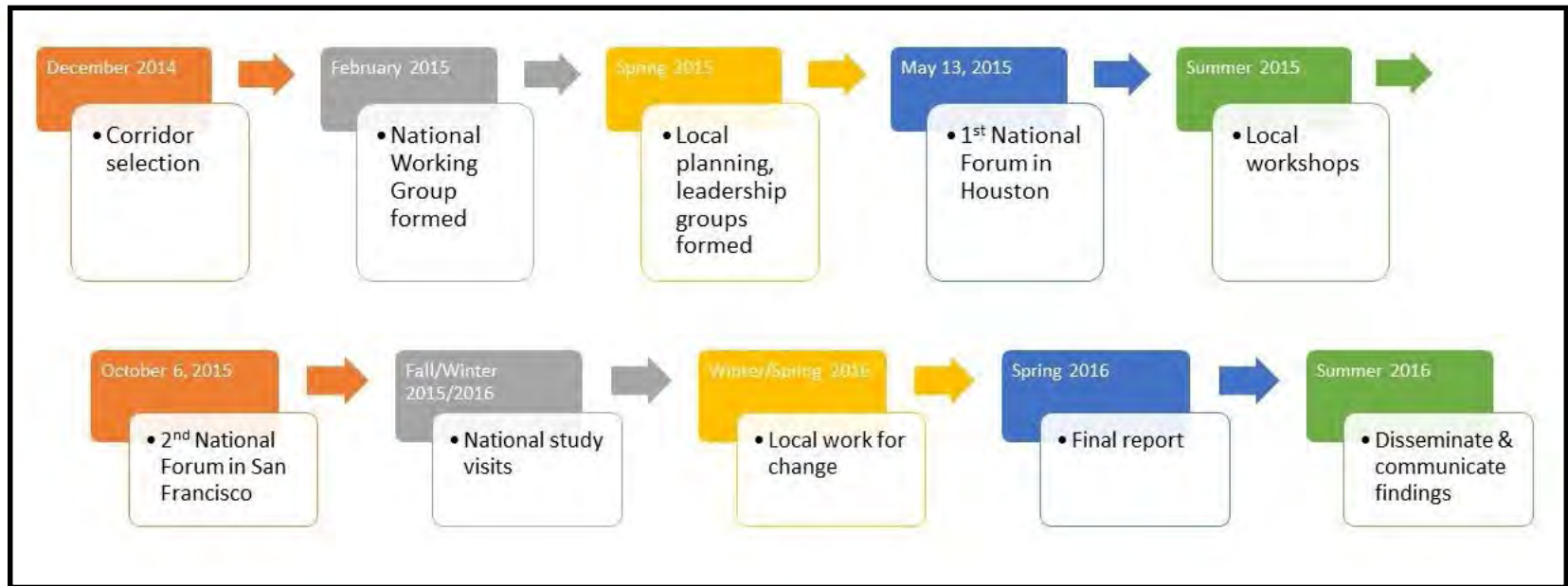


Akron, OH



Appleton, WI

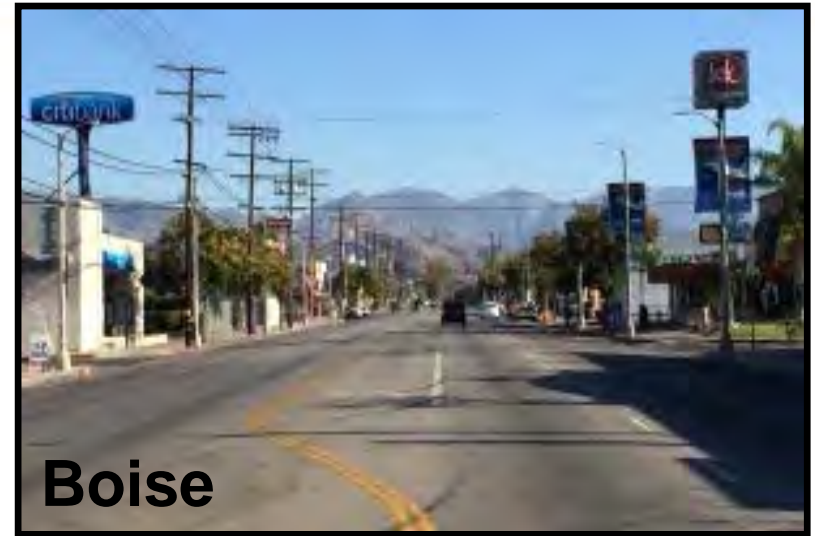
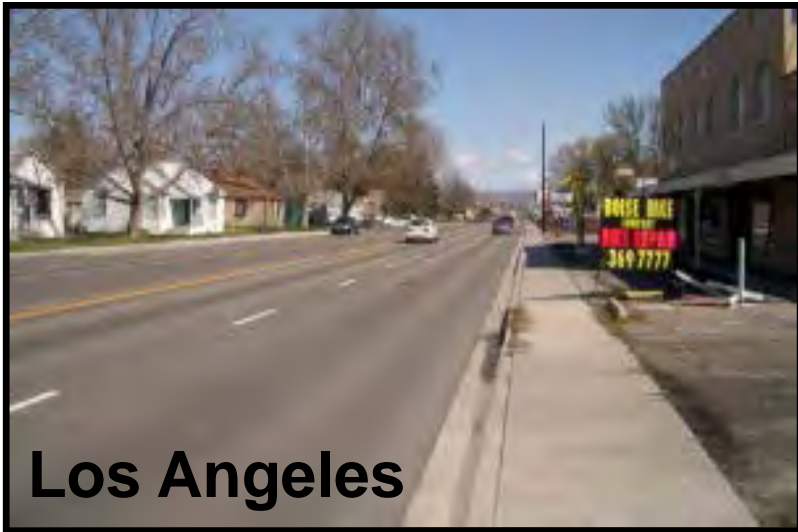
ULI Healthy Corridors Project



- Develop and refine approaches for creating healthy corridors
- Identify approaches that work
- Leverage new understanding around effective approaches
- Disseminate lessons learned throughout the ULI networks

<http://uli.org/research/centers-initiatives/building-healthy-places-initiative/healthy-corridors>

ULI Healthy Corridor Locations



Meetings with CDC



Two Projects of note

Linking of transportation variables
to NHIS

National Personal Household Travel
Survey



Staffs working together

Bike group

How funding programs work

NHTS: Health Condition, Walking/Biking for
exercise, Walking/Biking prohibitions, difficulty
traveling outside, mobility aids, physically active

One other BIG thing

TRANSPORTATION & HEALTH TOOL *Loaded with Indicators*

**CDC and USDOT
Jointly Funded
Project**

Goals

- **Help transportation decision-makers understand public health**
- **Inform health-supportive transportation policies and project decisions**
- **Strengthen collaborations between Trans. and PH sectors**

Uses

- **Online pre-loaded with region and state data**
- **Assess how state/ MPO is performing/where to improve**
- **Offer policy recommendations**
- **Evidence base for integrating PH and Trans.**

Transportation Health Tool

14 Indicators

- **Alcohol-impaired Fatalities**
- **Commute Mode Shares**
- **Complete Streets Policies**
- **Housing and Transportation Affordability**
- **Land Use Mix**
- **Person Miles Traveled by Mode**
- **Physical Activity from Transportation**
- **Proximity to Major Roadways**
- **Public Transportation Trips per Capita**
- **Road Traffic Fatalities by Mode**
- **Road Traffic Fatalities Exposure Rate**
- **Seat Belt Use**
- **Use of Federal Funds for Bike and Ped Efforts**
- **Vehicle Miles Traveled per Capita**

Transportation Health Tool

Transportation and Health Tool

Map Indicator Tool

Indicator Profiles

Strategies

Scoring Methodology

Literature and Resources

Home

Transportation and Health Tool




Photo credit: www.pedbikeimages.org / Laura Sandt

What is the Transportation and Health Tool?

The "Transportation and Health Tool" provides easy access to a set of transportation and public health indicators, reported at the state and metropolitan level. You can use the tool to quickly see how your state or metropolitan area compares with others in addressing key transportation and health issues. It also provides information and resources to help agencies better understand the links between transportation and health and to identify strategies for improvement.

<https://stage8.dot.gov/mission/health/transportation-and-health-tool>

Transportation Health Tool

Indicator Profiles

- ~ Description
- ~ Transportation and Health Connection
- ~ About the Data
- ~ Moving Forward
- ~ Related Strategies
- ~ References

Complete Streets Policies

Indicator Description

The Complete Streets Policies indicator provides information on whether or not a state or the metropolitan planning organization that serves the region or a given metro area has adopted a complete streets policy that requires or encourages a safe, comfortable, integrated transportation network for all users, regardless of age, ability, income, ethnicity, or mode of transportation. Data come from the National Complete Streets Coalition's list of complete streets policies. A score of either 0 (no policy) or 100 (policy in place) is provided for this indicator.

Transportation and Health Connection

Roadways traditionally have been designed primarily for motor vehicles. A personal vehicle-centric design approach

Transportation Health Tool

Strategies to Address Health

- ~ Description
- ~ Tie to indicators
- ~ Health Benefits
- ~ Resources-more Info
- ~ Evidence Base
- ~ Field Examples

- Built environment strategies to deter crime
- Child Passenger Safety laws, child safety seat distribution programs, education and enhanced enforcement
- Clean freight
- Complete Streets
- Distracted driving
- Encourage and promote safe Bicycling and walking
- Expand bicycle and pedestrian infrastructure
- Expand public transportation
- Graduated driver licensing systems
- Health impact assessment (HIA)
- Health performance metrics
- High-occupancy vehicle lanes
- Impaired driving laws
- Improve roadway safety
- Improve vehicles and fuels
- Integrate health and transportation planning
- In-vehicle monitoring and feedback
- Multimodal access to public transportation
- Promote connectivity
- Ride sharing programs
- Rural public transportation systems
- Safe Routes to School programs
- Seat belt laws
- Strengthen helmet laws
- Traffic calming to slow vehicle speeds

Transportation Health Tool

Scoring Methodology

- ~ Raw Value
- ~ Score “0 to 100”
- ~ Percentile
- ~ Standardized “Z” Score
- ~ “Z” adjusted for outliers
- ~ Adjusted so a higher score is always better

Tool Scoring Methodology

A primary objective of the “Transportation and Health Tool” is to help users understand the connection between transportation and health. Many of the indicators used in the tool are technical. Users who are not transportation and health specialists might wonder if the indicator values for their state or urban area are “good” or “bad.” For some indicators, higher values are better. For other indicators, lower values are better. The range of results varies widely between indicators.

To make results easier to interpret, the website provides scores for states, metropolitan statistical areas, and urbanized areas on a scale of 0 to 100, where higher values are better. The score for a given state or area represents its percentile value. This is the percent of states or regions that score below it.

Transportation Health Tool

Indicators by Geography

Indicator	Geography		
	State	MSA	UZA
Commute Mode Share (Auto, Transit, Bike, Walk)	X	X	
Complete Streets	X	X	
DUI/DWI Fatalities	X	X	
Housing/Transportation Affordability		X	
Land Use Mix		X	
PMT (Auto, Walking)	X		
Physical Activity from Transportation	X		
Proximity to Major Roadways	X	X	
Road Traffic Fatalities (Auto, Bike, Ped)	X	X	
Seat Belt Use	X		
Traffic Fatalities Exposure Rate (Auto, Bike, Ped)	X	X	
Transit Trips per Capita	X		X
Use of Federal Funds for Bike/Ped	X		
VMT per Capita	X		X

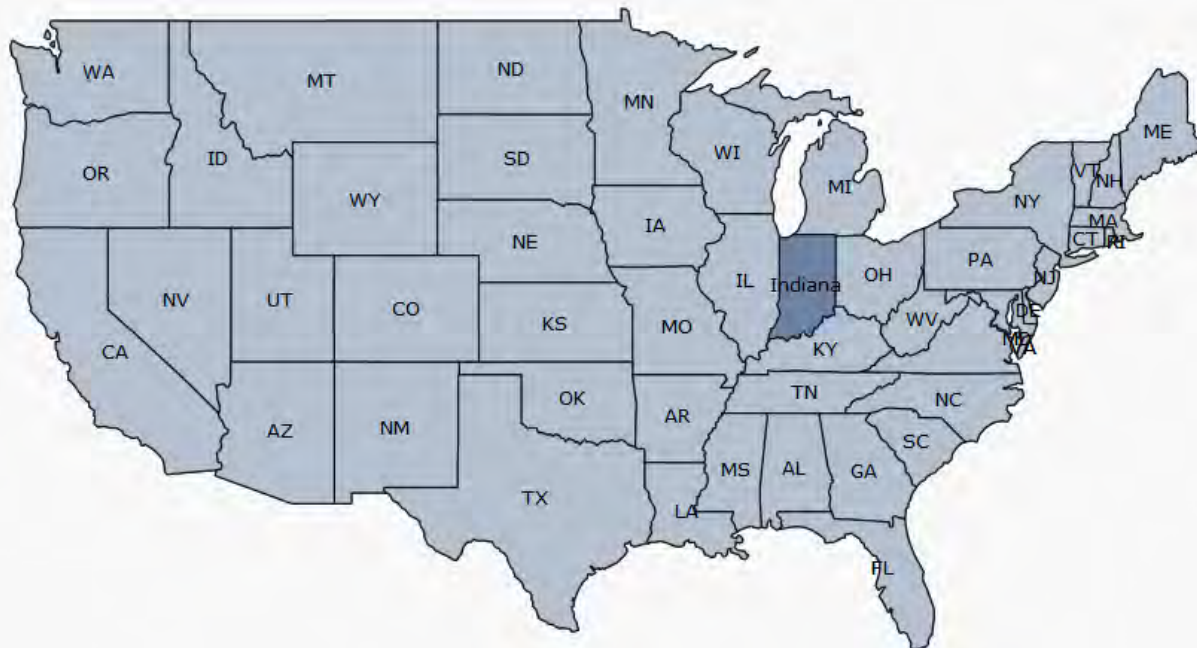
<https://stage8.dot.gov/mission/health/transportation-and-health-tool>

Transportation Health Tool

States Metropolitan Statistical Areas Urbanized Areas

States

Select a tab to view indicators at the State level, Metropolitan Statistical Area (MSA) level, or Urbanized Area (UZA) level



<https://stage8.dot.gov/mission/health/transportation-and-health-tool>

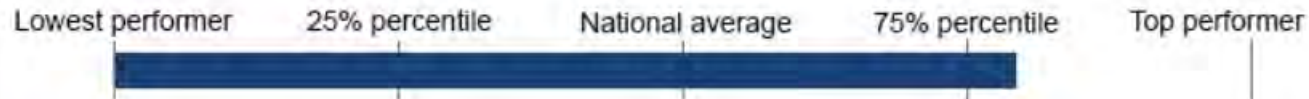
Transportation Health Tool

A lower score and shorter bar indicates a lower health performer

A higher score and longer bar indicates a better health performer



For example, the bar below shows an 80th percentile score, meaning that this area performs better than 80% of others in terms of this indicator



Commute Mode Share – Auto Raw Value = 92.1% Score = 20



Commute Mode Share – Transit Raw Value = 1.1% Score = 31



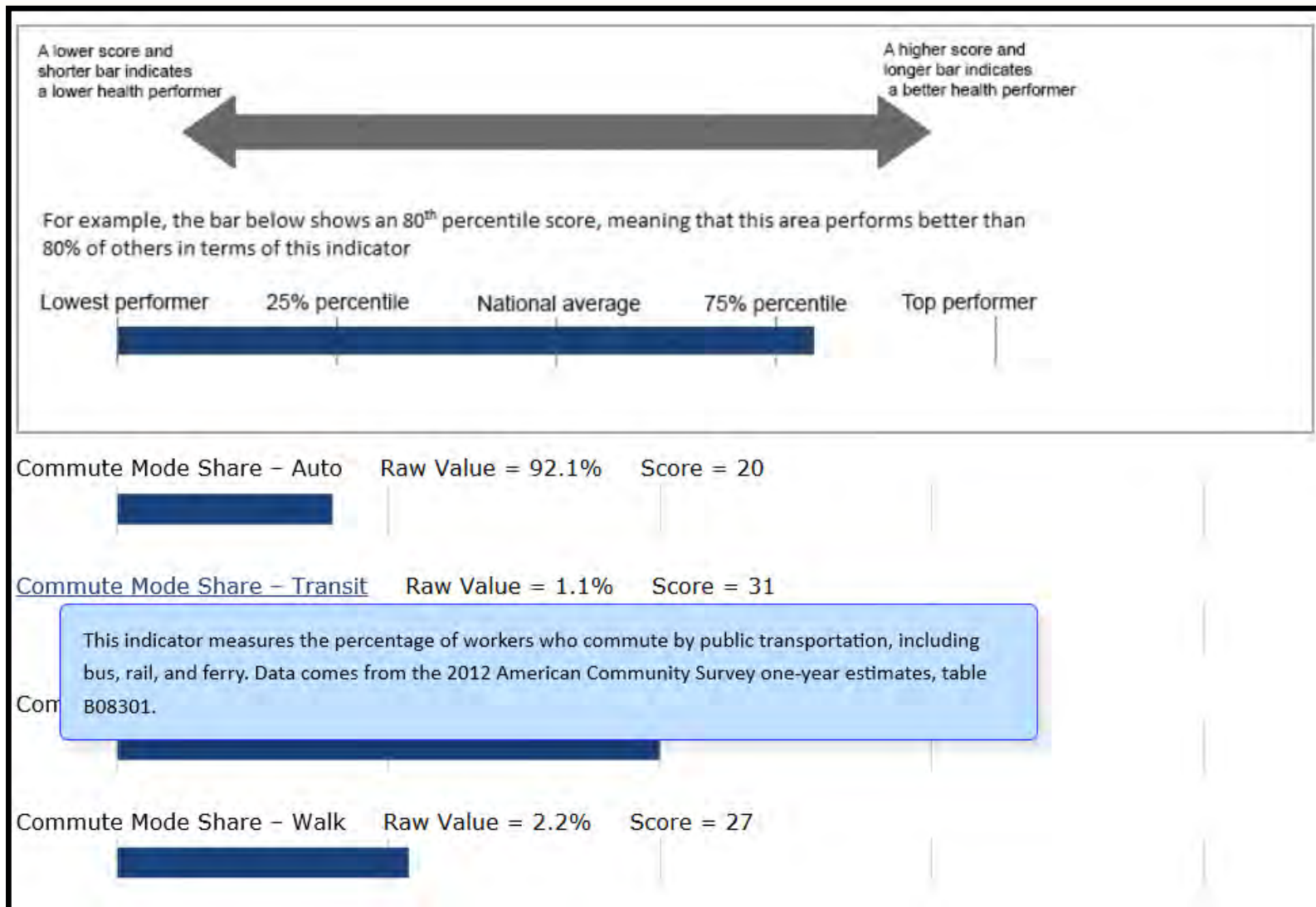
Commute Mode Share – Bicycle Raw Value = 0.5% Score = 50



Commute Mode Share – Walk Raw Value = 2.2% Score = 27

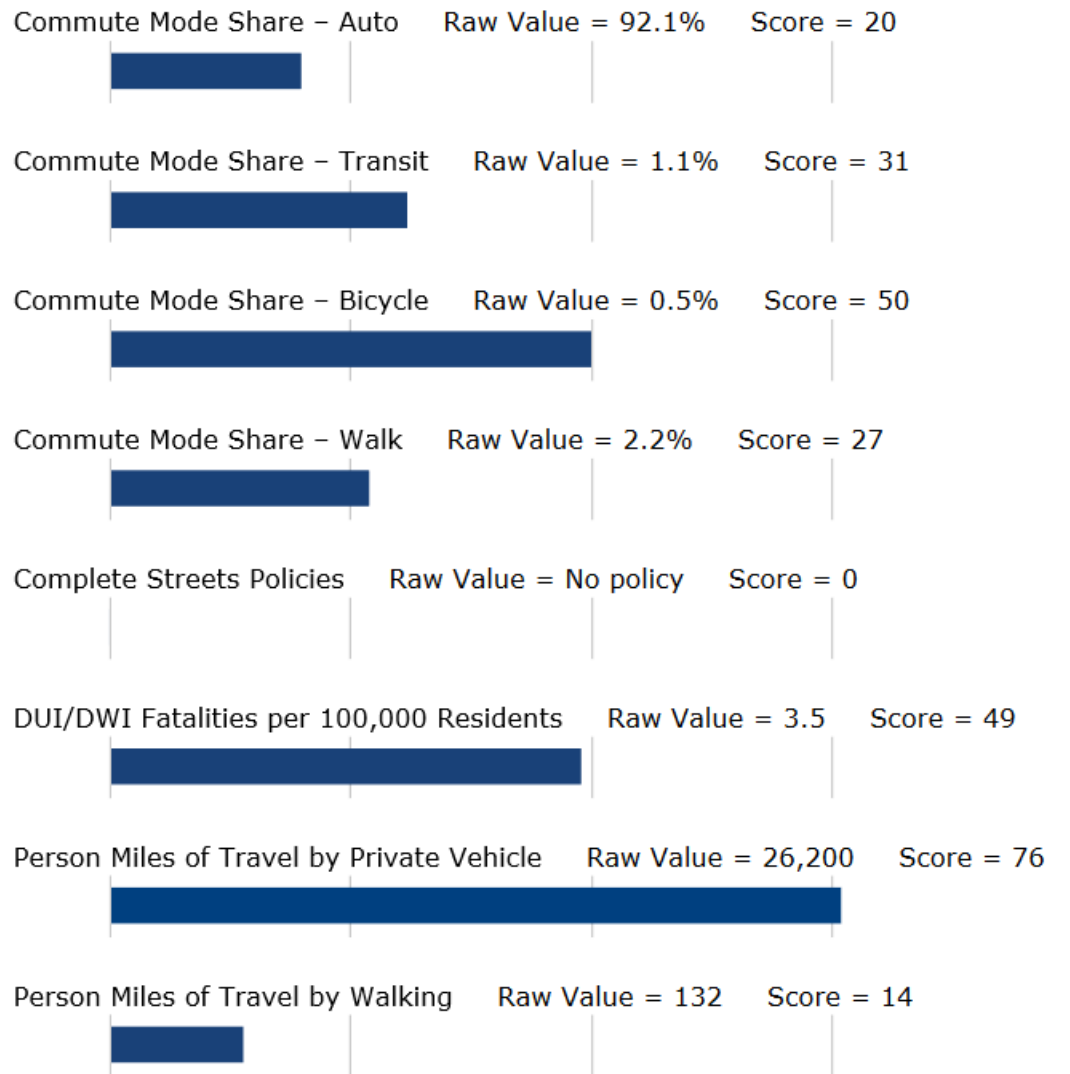


Transportation Health Tool



<https://stage8.dot.gov/mission/health/transportation-and-health-tool>

Transportation Health Tool



<https://stage8.dot.gov/mission/health/transportation-and-health-tool>

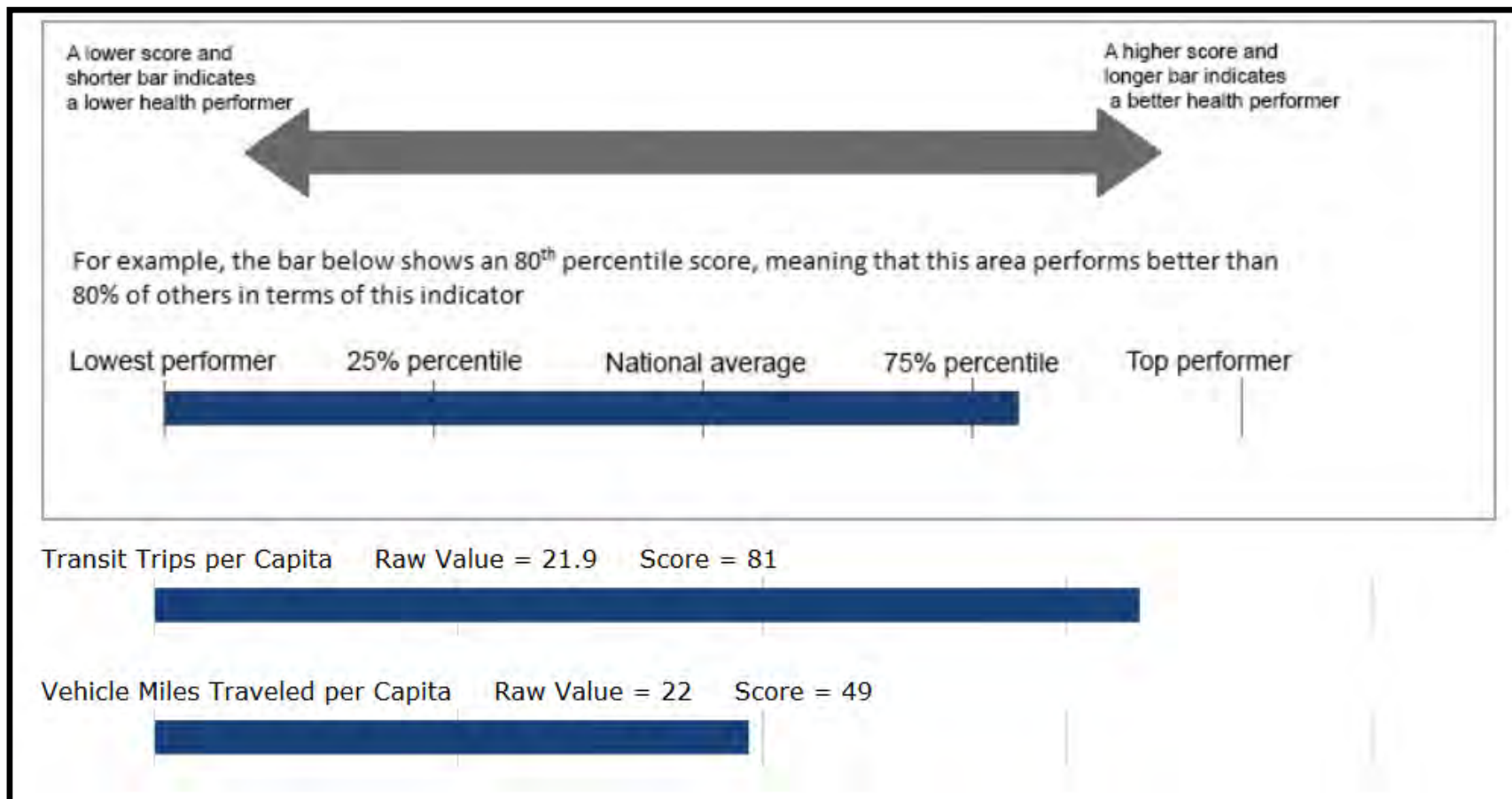
THT ~ State of Indiana Indicators

Commute Mode Share – Auto	Raw Value = 92.1%	Score = 20
Commute Mode Share – Transit	Raw Value = 1.1%	Score = 31
Commute Mode Share – Bicycle	Raw Value = 0.5%	Score = 50
Commute Mode Share – Walk	Raw Value = 2.2%	Score = 27
Complete Streets Policies	Raw Value = No policy	Score = 0
DUI/DWI Fatalities per 100,000 Residents	Raw Value = 3.5	Score = 49
Person Miles of Travel by Private Vehicle	Raw Value = 26,200	Score = 76
Person Miles of Travel by Walking	Raw Value = 132	Score = 14
Physical Activity from Transportation	Raw Value = 7.08	Score = 27
Proximity to Major Roadways	Raw Value = 0.01%	Score = 97
Road Traffic Fatalities/100,000 Residents – Auto	Raw Value = 10.6	Score = 46
Road Traffic Fatalities/100,000 Residents – Bicycle	Raw Value = 0.2	Score = 41
Road Traffic Fatalities/100,000 Residents – Pedestrian	Raw Value = 0.9	Score = 78
Seat Belt Use	Raw Value = 0.94	Score = 90
Road Traffic Fatalities Exposure Rate – Auto	Raw Value = 11.5	Score = 51
Road Traffic Fatalities Exposure Rate – Bicycle	Raw Value = 42.3	Score = 40
Road Traffic Fatalities Exposure Rate – Pedestrian	Raw Value = 40.5	Score = 53
Transit Trips per Capita	Raw Value = 11.7	Score = 55
Use of Federal Funds for Bike and Ped Efforts	Raw Value = 3.10%	Score = 90
Vehicle Miles Traveled per Capita	Raw Value = 11,737	Score = 18

THT ~ Muncie MSA

Commute Mode Share – Auto Raw Value = 89.5% Score = 61
Commute Mode Share – Transit Raw Value = 1.7% Score = 59
Commute Mode Share – Bicycle Raw Value = 1.0% Score = 80
Commute Mode Share – Walk Raw Value = 5.2% Score = 95
Complete Streets Raw Value = No policy **Score = 0**
DUI/DWI Fatalities per 100,000 Residents Raw Value = 2.6 Score = 61
Housing and Transportation Affordability Raw Value = 51.9% **Score = 48**
Land Use Mix Raw Value = 0.49 **Score = 47**
Proximity to Major Roadways Raw Value = 0.00% Score = 100
Road Traffic Fatalities/100,000 Residents – Auto Raw Value = 8.8 Score = 57
Road Traffic Fatalities/100,000 Residents – Bicycle Raw Value = 0.0 Score = 89
Road Traffic Fatalities/100,000 Residents – Pedestrian Raw Value = 0.3 Score = 95
Road Traffic Fatalities Exposure Rate – Auto Raw Value = 9.8 Score = 57
Road Traffic Fatalities Exposure Rate – Bicycle Raw Value = 0.0 Score = 97
Road Traffic Fatalities Exposure Rate – Pedestrian Raw Value = 6.6 Score = 98

THT ~ Muncie Urbanized Area



Transportation Health Tool

<https://stage8.dot.gov/mission/health/transportation-and-health-tool>

This URL will change when the site is OFFICIALLY released on October 28, 2015

How Does Transportation Affect PH?

Article with MPO and state DOT examples of where public health is an active component of the organization

MPOs tend to be programmatic focused

State DOTs tend to be process and goal oriented.



<https://www.fhwa.dot.gov/publications/publicroads/13mayjun/05.cfm>

What about Health Impact Assessments?

HIA is a process to analyze and evaluate the potential effects that a proposed policy or project may have on human health and to help determine the best approach to **mitigate** those effects

Major Steps

1. Screen
2. Scope
3. Assess
4. Recommend
5. Report Results
6. Monitor/Evaluate

<http://www.cdc.gov/healthyplaces/hia.htm>

<http://www.pewtrusts.org/en/projects/health-impact-project/research-and-analysis/toolkits-guides-and-data-sources>

Proposed Bus Routes Expansion (Marion Cnty)

IN Univ Dept of Public Health Marion County Health Department Indianapolis MPO

Graduate level HIA course
First half learned HIA
Second half hands-on experience

Students conducted a rapid assessment
Focused on physical activity, obesity, and
diabetes.

AT A GLANCE

Status	Complete
Completion Date	2011
Decision-Level	Local
Sector	Transportation
Organization type	Educational Institution

<http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/hia-map/state/indiana/hia-of-a-proposed-expansion-of-bus-routes>

<http://www.pewtrusts.org/en/projects/health-impact-project>

TRB Activities



Formed 5 Years ago

Co-Chairs

Ed Christopher

Eloisa Raynault *formerly
with APHA*

Co-Sponsoring Committees

- *Urban Data and Information Systems (ABJ 30)*
- *Travel Behavior and Values (ADB10)*
- *Transportation and Sustainability (ADD40)*
- *Environmental Justice in Transportation (ADD50)*

Typical committee activities

Website

ListServe (over 380 subscribers)

<http://www.chrispy.net/mailman/listinfo/H+T--Friends>

[Follow](#) @TRBhealth on Twitter

Facebook <https://www.facebook.com/groups/trbhealthandtransportation/>

Newsletter, Research Statements, Paper Calls

Review Papers, sponsor Sessions and Workshops

<http://www.trbhealth.org>

Notable progress

Navigating the Intersection of Transportation and Public Health

A Cross-Cutting Session

TRB Annual Meeting
Monday, January 14, 2013
Washington Hilton Hotel
Washington D.C.

Session Proceedings and Survey of TRB Committees' Interest in Public Health



Prepared by
Ed Christopher
Carey McAndrews
Eloisa Raynault

The information presented here is the sole responsibility of the authors and does not represent the views, opinions or policies of the Transportation Research Board. It was developed for the sole purpose of exchanging information on a very timely and emerging topic.

Raising Public Health Issues to a Higher Level in the Transportation Sector

Session Proceeding
TRB Annual Meeting
Monday, January 13, 2014
Washington Hilton Hotel
Washington D.C.



Prepared by
Ed Christopher
Megan Wier
May, 5 2014

The information presented here is the sole responsibility of the authors and does not represent the views, opinions or policies of the Transportation Research Board. It was developed for the sole purpose of exchanging information on a very timely and emerging topic.

<http://www.trbhealth.org/highlights>

<http://www.trbhealth.org>

TRNews Themed Issue

Due out November 2015

Public Health and Transportation Innovation, Intervention and Introspection

Sampling of articles

Setting the Stage: Why Public Health (PH) and Transportation

Health Impact Assessment. What is it? When, where and why do them?

How to connect with the PH Community

Health in Transportation: An MPO and State DOT Focus

Incorporating Health in an MPO Planning Process

Perspectives from the TRB Committees that sponsor the subcommittee

...and more

New Task Force

January 2015 TRB approved a new Task Force

Task Force on Arterials and Public Health (ADD55T)

...to inform the Planning, Design, and Operation of arterials while considering the implications to Public Health

- 3 year Life
- Vetted research agenda
- Very broad support
- Just forming

<https://www.mytrb.org/CommitteeDetails.aspx?CMTID=4403>

All Roads Lead to the Future

2016 Annual Meeting

Subcommittee

Sunday Workshop

Institutionalizing Health in Transportation Agencies

Poster Session

Innovations in Health and Transportation

Subcommittee Meeting

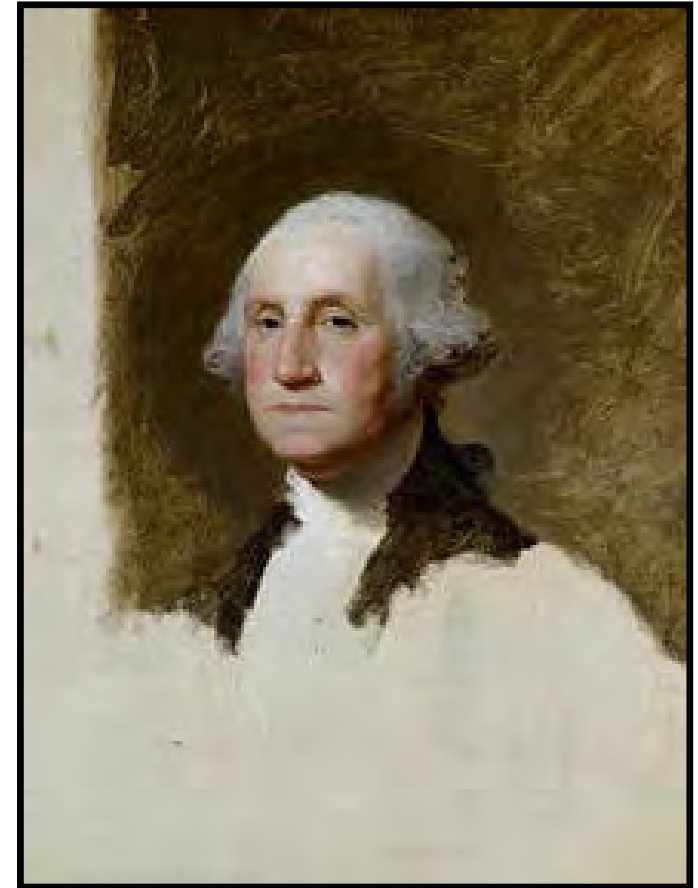
Task Force Meeting

TRB Executive Board (Special Health focus)

Surgeon General's Call to Action

Surgeon General Announces His Call to Action to Promote Walking and Walkable Communities

The U.S. Surgeon General's Call to Action campaign, called "Step It Up!," recognizes the importance of physical activity for people of all ages and abilities. "Step It Up" includes five strategic goals: 1) make walking a national priority; 2) design communities that make it safe and easy to walk for people of all ages and abilities; 3) promote programs and policies to support walking where people live, learn, work, and play; 4) provide information to encourage walking and improve walkability; and 5) fill surveillance, research, and evaluation gaps related to walking and walkability.



<http://www.surgeongeneral.gov/library/calls/walking-and-walkable-communities>

Social Determinants of Health

Economic Stability

Poverty -- Employment
Food Security -- Housing Stability

Education

High School Graduation
Enrollment in Higher Education
Language and Literacy
Early Childhood Ed. and Development

Social and Community Context

Social Cohesion -- Civic Participation
Perceptions of Discrimination and Equity
Incarceration/Institutionalization

Health and Health Care

Access to Health Care/ Primary Care
Health Literacy

Neighborhood and Built Environment

Access to Healthy Foods
Quality of Housing
Crime and Violence
Environmental Conditions



<http://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health>

Thank you

Is your MPO/DOT doing anything with Public Health? Let me know. Lets Talk

Ed Christopher
FHWA Resource Center
Planning Team
708-283-3534
Ed.Christopher@dot.gov



After December 31 edc@edthefed.com

<http://www.americashealthrankings.org/>

<http://www.countyhealthrankings.org/>

<https://stage8.dot.gov/mission/health/transportation-and-health-tool>

Step it Up!



<https://www.youtube.com/watch?v=mq3DxArKAEo>