Welcome to
The Planning Exchange
Transportation and Health Tool

Transportation.gov
U.S. Department of Transportation

Home

Transportation and Health Tool

What is the Transportation and Health Tool?

The Transportation and Health Tool (THT) was developed by the U.S. Department of Transportation and the Centers for Disease Control and Prevention to provide easy access to data that practitioners can use to examine the health impacts of transportation systems.

Photo credit: www.pedbikeimages.org / Laura Sandt

http://www.transportation.gov/transportation-health-tool
A Holistic Approach

Active Transportation

Safety

Equity

Cleaner Air

Connectivity
Federal Planning Process

- Motivation (Why?)
- Incorporation into Planning Process (What/Where?)
- Early Actions (How?)
- Structural Changes (How?)
- Incorporation into Decision-making

Critical Factors and Inputs:
- Regional Vision and Goals
- Alternate Improvement Strategies (Operations, Capital)
- Evaluation & Prioritization of Strategies
- Development of Transportation Plan (LRP)
- Development of Transportation Improvement Programs (S/TIP)
- Project Development
- Systems Operations (Implementation)
- Monitor System Performance (Data)
Tool Development Workshop

- Expert workshop in April, 2013 with 48 subject matter experts
- Recommendations on:
  - Health & Transportation Categories
  - Indicators
  - Proposed tool design
  - Scoring and Rating

Refining the Indicators

- 190
- 45
- 34
- 14
Final 14 Indicators

Transportation

- Commute Mode Share
- Person Miles Traveled by Mode
- Public Transportation Trips per Capita
- Vehicle Miles Traveled per Capita
- Housing & Transportation Affordability
- Land Use Mix
- Proximity to Major Roadways

Health

- Alcohol-Impaired Fatalities
- Road Traffic Fatalities by Mode
- Road Traffic Fatalities Exposure Rate by Mode
- Physical Activity from Transportation

Policy

- Seat Belt Use
- Complete Streets Policies
- Use of Federal Funds for Bicycle and Pedestrian Efforts
Finding the Indicator Data

Click on tabs to access indicator data at different geographic scales.
Looking Up Indicators by Area

Click on your State, UZ or MSA
The following strategies are included:

- Resources that provide a base of evidence for the brief description and in general
- An example, or examples, of how the strategy has been applied in practice

- 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
Encourage and Promote Safe Bicycling and Walking

Educating people about safe bicycling and walking, enforcing laws that make it easier and safer for people to bicycle and walk, and encouraging people to bicycle and walk, may help increase walking and bicycling activity, especially when combined with infrastructure improvements. This strategy is related to and supports such programs as Safe Routes to School, Complete Streets, and Expand and Improve Bicycle and Pedestrian Infrastructure.

Education programs may involve

- teaching walking and bicycling skills to adults and children,
- training law enforcement officials on bicycling and walking laws, and
- developing campaigns to promote safety awareness.

Enforcement strategies include

- refining existing laws,
- stepping up enforcement of traffic safety laws,
- targeting issues such as equipment theft and assaults on pedestrians and bicyclists,
- using non-motorized patrols, and
- collaborating with law enforcement officials and community members.

Encouragement programs can encompass a wide range of strategies such as

- broad or targeted media campaigns,
- public service announcements,
- bicycling or bike-sharing education,
- special events, such as community rides or walks,
- commuter benefit programs,
Case Study - NYC Pedestrian Safety Study and Action Plan

PEDESTRIANS

The New York City Pedestrian Safety Study & Action Plan

The first, unprecedented, Pedestrian Safety Report and Action Plan examines over 7,000 records of crashes that have caused serious injuries or fatalities to pedestrians, and identifies underlying causes. DOT will use this data to inform the work the agency does to reduce traffic fatalities and make New York City streets safe for everyone.

The Action Plan builds upon DOT’s strategic plan, Sustainable Streets, as well as the work DOT has done in accordance with Local Law 11, signed into law by Mayor Bloomberg in April 2003.

- Read Mayor Bloomberg’s press release about the report and the addition of 1500 pedestrian countdown signals citywide
- Download the map of pedestrian countdown signals and list of locations citywide

Anti-Speeding Campaign

Building on the Action Plan, DOT has launched an anti-speeding ad campaign to improve safety for pedestrians, motorists and cyclists throughout the city.

- Read the press release announcing the new campaigns.

Download the report (pdf):
- Pedestrian Safety Study & Action Plan
- Technical Supplement
- Appendices A, B & C

Key Findings

- 2009 was the safest year on record in New York City history.
- Traffic fatalities in 2009 were down by 35% from 2001.
- NYC’s traffic fatality rate is about a quarter of the national rate and less than half the rate in the next 10 largest U.S. cities.
- Traffic crashes cost the City’s economy $4.29 billion annually.
- Pedestrians are 10 times more likely to die than a motor vehicle occupant in the event of a crash.
- Pedestrians accounted for 52% of traffic fatalities from 2005-2009.
- Driver inattention was cited in nearly 36% of crashes resulting in pedestrians killed or seriously injured.
The following strategies are included:

- Built environment strategies to deter crime
- Child Passenger Safety laws, child safety seat distribution programs, education and enhanced enforcement
- Clean freight
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- Expand bicycle and pedestrian infrastructure
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- Traffic calming to slow vehicle speeds
Traffic Calming to Slow Vehicle Speeds

The Institute of Transportation Engineers defines traffic calming as the combination of measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users. Traffic calming consists of physical design and other measures put in place on existing roads to reduce vehicle speeds and improve safety for pedestrians and cyclists. For example, vertical deflections (speed humps, speed tables, and raised intersections), horizontal shifts, and roadway narrowing are intended to reduce speed and enhance the street environment for non-motorists. Closures that obstruct traffic movements in one or more directions, such as median barriers, are intended to reduce cut-through traffic. Traffic calming measures can be implemented at an intersection, street, neighborhood, or area-wide level.

"Road diets" are one approach to traffic calming. Road diets involve a reduction in the width or number of vehicular travel lanes and reallocate that space for other uses such as bicycle lanes, pedestrian crossing islands, left turn lanes, or parking. Safety and operational benefits for vehicles and pedestrians include:

- decreasing vehicle travel lanes for pedestrians to cross,
- providing room for a pedestrian crossing median,
- improving safety for bicyclists when bicycle lanes are added,
- providing an opportunity for on-street parking (which also serves as a buffer between pedestrians and vehicles),
- reducing rear-end and side-swipe crashes,
- improving speed limit compliance, and
- decreasing crash severity when crashes do occur.

Implementation of traffic calming measures can reduce traffic speed, reduce motor-vehicle collisions, and improve safety for pedestrians and cyclists. These measures can also increase pedestrian and bicycling activity.

Related Transportation and Health Tool Indicators

- Commute Mode Share
- Complete Streets Policies
- Person Miles Traveled by Mode
- Physical Activity from Transportation
- Road Traffic Fatalities by Mode
- Road Traffic Fatalities Exposure Rate
- Use of Federal Funds for Bicycle and Pedestrian Efforts
- VMT per Capita
- Land Use Mix

How can this strategy result in health benefits?

Federal funds bicycle-pedestrian efforts
Traffic Calming - Case Study

Seattle, Washington – A Multi-Faceted Approach to Speed Reduction
Health in Transportation

Welcome to the Health in 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.

http://www.fhwa.dot.gov/planning/health_in_transportation/
Thank you!

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