Public transportation drives health by moving people.

**PROBLEM** In the United States, 45% of people have no access to public transportation, making it difficult to access jobs, food, education, healthcare services, and social connections.

**SOLUTION** All modes of public transportation are important, but bus routes play a special role in the lives of Americans. Frequent and reliable bus routes allow for service to more destinations over a larger area and can adapt to meet the changing needs of communities. Buses are also used by more people who depend on public transportation, thereby providing greater equity benefits.

**RESULTS** Increasing access to frequent, reliable public transportation can lead to fewer traffic vehicle crashes, reduced air pollution and associated respiratory illnesses, and increased physical activity levels. Even people who don’t use public transportation benefit from less traffic congestion, less pollution, and lower community costs for healthcare. Buses can connect more people to everyday destinations by allowing riders to get closer to their final destinations.

What is Public Transportation?

Public transportation varies by community and includes many mobility options for the public such as:

- **BUSES**
- **LIGHT RAIL**
- **PARATRANSIT**
- **SUBWAY SYSTEMS**

How Can Public Transportation Improve Economic Development and Health?

- **PEOPLE**
  - Increases access to jobs, schools, grocery stores, and medical care
  - Increases physical activity
  - Reduces respiratory symptoms including asthma
  - Helps conserve limited resources for families who would struggle to pay for a private vehicle
  - Provides personal mobility and freedom

- **COMMUNITIES**
  - Improves air quality by reducing pollution
  - Reduces injuries and deaths from motor vehicle crashes
  - Reduces traffic congestion, improving air quality and quality of life for all
  - Revitalizes communities and stimulates local economies

Minorities are more likely to depend on public transportation.

**HOUSEHOLDS THAT DO NOT OWN A CAR:**

- 24% African-American households
- 17% Latino households
- 13% Asian-American households
- 7% White households

Over two thirds of riders walk to their stop or station.

87% of trips on public transit directly affect the local economy.
What’s the evidence behind public transportation and the impact on health?

The Centers for Disease Control & Prevention (CDC) has identified introducing and expanding public transportation as one of 14 key evidence-based interventions that can improve health in five years or less and is cost effective. Direct health benefits include reducing injuries associated with motor vehicle crashes and reducing adverse health impacts associated with exposure to air pollution.

Public transportation use is associated with increased physical activity levels. Physical activity can:

- lower the risk of chronic conditions;
- improve aerobic fitness, mental health, and cognition; and
- help prevent weight gain.

Public transportation also plays a critical role during emergencies like the COVID-19 pandemic by:

- transporting first responders and essential employees,
- evacuating vulnerable populations, and
- revitalizing the economy after emergencies.

Why should public health join forces with public transportation?

Public transportation improves access to jobs, schools, healthy food options, and medical care. It can also improve mental health and well-being by giving people of all abilities the independence to get around and connect with others in their communities. Working toward shared goals with allies from the public transportation sector is a win-win for public health practitioners and for transportation planners.

How can public health practitioners collaborate with transportation planners?

Although public health and transportation are two very different disciplines, many similarities exist between them. Both disciplines use data to make decisions and pilot projects to inform future efforts. Both have similar goals, such as improving public safety and connectedness. Contact local transportation planners to exchange information about your goals and projects to identify opportunities to collaborate.

What role can public health play?

Transforming the public transportation system to ensure more people who need it have access to it requires a multi-sectoral approach including public health. Public health can:

- Bring public health, transportation, and land use decision makers together regularly to learn about upcoming projects and engage with the community before ground is broken.
- Provide health data to decision makers that you already collect to build evidence for the need to increase access to public transportation.
- Invite transportation planners and mobility managers to offer their perspectives on interventions you are planning, including what data to collect.

PUBLIC TRANSPORTATION SUPPORTS JOBS

430,000 JOBS Supported in total

50,000+ JOBS Supported for every $1 billion invested

SUCCESS STORY

MICHIGAN Public Transportation Success

In 2015, Flint, Michigan had high unemployment but neighboring counties such as Livingston, 40 miles away, had a labor shortage and jobs to fill. The problem: Flint residents didn’t have reliable transportation to get to these jobs. The solution: A new bus service. Now more than 30,000 riders take buses each month to job destinations in four neighboring counties.
Cost-effective Health Intervention?  

Why is Public Transportation Such a Healthy Intervention?  

**Public transportation saves money**  
The average household spends about 15 cents of every dollar on buying, maintaining, and operating cars, the largest expenditure after housing. In the United States, transportation expenditures are inversely correlated with income. When localities fail to provide transportation options, cars may be a necessity to get to work or school or access basic services, leaving low-income households with fewer options and greater financial burden.

**Public transportation is a win-win for states and municipalities**  
- Each $1 invested in public transportation generates $4x as much in economic returns.
- Every $10 million of capital investment in public transportation earns $30 million in increased business sales.

**Public transportation is a win-win for riders and drivers**  
Public transit investment has wide-ranging economic benefits for both those who ride it and those people who continue to drive, reducing health impacts of pollution, traffic congestion, and overall community health costs.

**Public transportation comes with options**  
Public transportation comes in many shapes and forms, allowing decision makers to pursue the options that work for their residents. Buses are often an ideal introductory public transportation solution. Existing road infrastructure allows bus transit to be easily added, expanded, or changed as needs evolve.

---

### Maria’s Story

Maria is a mother of two who could not reliably get her children to school and make it to her job across town when her older car needed too many repairs. When a city bus route added a reliable crosstown express service, she had another option to get around dependably. The added physical activity reduced her stress levels and brought her weight to healthy levels for the first time in years.

### Why Should Your Community Strengthen Support for Buses?

- **Buses are on one of the easiest modes to implement.** Buses can operate on existing roads, which means lower capital costs and can allow for dedicated bus lanes.
- **Sidewalks to bus stops can also increase physical activity and lead to more people meeting the Active People, Healthy Nation goal of getting 27 million people more physically active by 2020.**
- **Buses can reduce traffic congestion, which can improve air quality.**
- **While many Americans may never have ridden a train or a subway, many are familiar with or have experience riding a bus.**

### Expanding public transportation to include bus rapid transit or high-quality urban rail generates nearly $355 in per capita annual health benefits

**REFERENCES**

Actions for Public Health Practitioners

Identify action steps you can take to increase access to public transportation in the communities you work with.

**ACTION STEPS**

Review resources to better understand the intersection of health and transportation, such as:

- HI-5 Evidence Brief
- A Guide for Public Transportation Pandemic Planning and Response
- Robert Wood Johnson Foundation – How Does Transportation Impact Health?
- Transportation and Health Tool
- APHA Transportation and Health
- Vision Zero Network Resource Library

**WHAT CAN YOU DO?**

Learn all you can about the relationship between transportation and health.

Provide health-related data and tools to transportation partners.

Familiarize yourself with key terminology to help health speak the same language as transportation.

Identify opportunities for health and transportation to collaborate with one another.

**ACTION STEPS**

- Do your homework. Familiarize yourself with transportation or planning policies that relate to health such as Complete Streets policies. Identify the organizations whose goals and priorities align with yours.
- Look for shared priorities to collaborate on such as improving safety and air quality.
- Follow public transportation and public works agencies on social media and sign up for email notifications to stay up to date on their priorities.
- Attend transportation or planning conferences or invite potential partners to public health conferences and trainings to network.

- Attend transportation-focused community events to identify the transportation priorities and concerns of the people you serve, which can influence the type of transportation partners you reach out to.
- Bring together allies in the business community who may benefit from transportation improvements.

See Connecting Transportation & Health: A Guide to Communication & Collaboration for more ideas to connect with transportation stakeholders in your area.

**ACTION STEPS**

- Identify data familiar to both sectors such as traffic-related injuries and discuss opportunities to intervene together.
- Determine how to translate existing public health data to be useful for transportation planning or identify what data you can collect in the future to benefit transportation partners.
- Share research that highlights the role transportation plays in health.
- Build relationships with transportation stakeholders by providing data and resources that may be valuable for addressing their priorities, such as GIS maps you have prepared.

**WHAT CAN YOU DO?**

Learn all you can about the relationship between transportation and health.

Provide health-related data and tools to transportation partners.

Familiarize yourself with key terminology to help health speak the same language as transportation.

Identify opportunities for health and transportation to collaborate with one another.

**ACTION STEPS**

- Review resources such as the Public Health Terms for Planners & Planning Terms for Public Health Professionals Factsheet and the key terms in Connecting Transportation & Health: A Guide to Communication & Collaboration.

As a public health professional, don’t make assumptions about what public transportation professionals know about public health and vice versa. Instead explain what public health is and how it may differ from sectors such as healthcare.

- Clarify terms that are used by both sectors but may have different meanings such as environment.
- Explain what you mean. Public transportation and public health often use different terms to describe similar underlying priorities and goals. For example:

  - Public health uses evidence to create interventions that can increase health equity for target populations, leading to improvements in social determinants of health.
  - Public transportation uses data to build projects to increase access for customers/riders, leading to improvements in quality of life.