Pedestrians First
Tools for a Walkable City

pedestriansfirst.itdp.org

Icebreaker activity:
What’s your favorite walkable place?
What makes it walkable?
Tell us in the Zoom chat!

D. Taylor Reich
(they/them pronouns)
taylor.reich@itdp.org
1. Why walking matters
2. What is walkability?
3. How to use Pedestrians First
Why walking matters

Cars + cities = traffic jams
Why walking matters

People take up less space than cars
Why walking matters

Walking lets people get places
Why walking matters

Equity, Resilience, Environment, Economy, Health, Society
Why walking matters

Cities for Babies Benefit Everyone
Why walking matters

COVID-19 recovery + future resiliency
Why walking matters

See the research for yourself:

pedestriansfirst.itdp.org/about
pedestriansfirst.itdp.org/related-publications
Today’s Webinar

1. Why walking matters
2. What is walkability?
3. How to use Pedestrians First
What is walkability?
New Jersey:
Footpath:
- Clear
- Wide
- Maintained
Unsafe crossing
No destinations
No people walking

Is this walkable?
What is walkability?

Addis Ababa:
Blocked footpath
Unsafe street
Many destinations
Many people walking

Is this walkable?
Jakarta:
Dense neighborhoods
Quiet, narrow streets
Highways cutting neighborhoods off from each other

Is this walkable?
What is walkability?

Walkability:
- Street
- Neighborhood
- Transit
- City
Why another walkability tool?

There are already many tools:


See pedestriansfirst.itdp.org/related-publications
Why another walkability tool?

Pedestrians First is:

Global • Multipurpose • User-friendly • Action-oriented
1. Why walking matters
2. What is walkability?
3. How to use Pedestrians First
Quick stretch break :-)
Pedestrians First is a toolkit that anyone can use
How to use Pedestrians First

Walkability:

● Street
● Neighborhood
● Transit
● City

PEDESTRIANS FIRST
TOOLS FOR A WALKABLE CITY

VIEW CITY MEASUREMENTS
See maps and measurements of walkability for cities around the world.

MEASURE INCLUSIVE TRANSIT
Assess the inclusivity of a transit system. Transit connects neighborhoods.

EXAMINE A NEIGHBORHOOD
Use indicators to measure neighborhood walkability in detail.

VISIT A STREET
Walk a street with a checklist of design solutions for walkability.
Walkability:

- **Street**
- **Neighborhood**
- **Transit**
- **City**

How to use Pedestrians First

**Indicator 1: Walkways**

1. Pedestrian walkways on both sides of the street are dedicated, paved, and separated from vehicles. Alternatively, the entire street is primarily for pedestrians and only rarely used by vehicles, in which case separated walkways are not needed. **YES** **NO**

2. The walkway clear paths are wide enough for the pedestrian volume. **More Info**

3. The walkway clear path has no temporary or permanent obstructions that would prevent a wheelchair user from moving from one end of the sidewalk to the other. **More Info**

4. The walkways are easy to use and barrier-free for people with physical challenges. **More Info**

**Policy Recommendations**
How to use Pedestrians First

Amman, Jordan

Indicator 1: Walkways

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Policy Recommendations
Walkability:
- Street
- Neighborhood
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Self-survey of walkability indicators

How to use Pedestrians First

Indicator 5: Shade and Shelter

Shade and shelter help make the walkable environment more comfortable by protecting pedestrians from heat, rain, and other elements. Relief from the weather keeps babies and toddlers comfortable. By reducing stress on pedestrians, shade and shelter are good for caregivers’ mental health, helping them give more attentive care to their infants. Shaded walkways are defined as having a clear pedestrian path that is appropriately shaded during the hottest seasons.

1. Measure complete shade and shelter in Dupont Circle

Percentage of blocks in your neighborhood that provide adequate shade and shelter elements:

0 10 20 30 40 50 60 70 80 90 100

Goal: 75% or more of walkway segments have adequate shade or shelter

Best Practices

La Condesa, Mexico City
Ipanema, Rio de Janeiro
Souq as-Sukkar
How to use Pedestrians First

Walkability:
- Street
- Neighborhood
- **Transit**

Self-survey of inclusivity indicators
- City
How to use Pedestrians First

Walkability:
- Street
- Neighborhood
- Transit
- City

Database of five walkability indicators and maps in 1,000 cities
How to use Pedestrians First

Walkability:
- Street
- Neighborhood
- Transit
- City

Database of five walkability indicators and maps in 1,000 cities

1: People Near Services
2: People Near Transit
3: Block Density
4: Pop. Density
5: Car-Free Places
How to use Pedestrians First

Explore: zoom in on parts of a city

People Near Services and Population Density in northeastern Addis Ababa
How to use Pedestrians First

**Walkability in Fortaleza [BRA]**

1. People Near Services
   - Goal: 100% of residents
   - Result: 69%

2. People Near Transit
   - Goal: Not available because GTFS information is not available on OpenMobilityData.org.

3. Block Density
   - Goal: 50 blocks per km² or more
   - Result: 74%

4. Weighted Pop. Density
   - Goal: 15,000 people or more per square kilometer.
   - Result: 17,916

5. Car-Free Places
   - Goal: 100% of residents
   - Result: 19%

**Walkability in Tirane (Tirana) [ALB]**

1. People Near Services
   - Goal: 100% of residents
   - Result: 63%

2. People Near Transit
   - Goal: Not available because GTFS information is not available on OpenMobilityData.org.

3. Block Density
   - Goal: 60 blocks per km² or more
   - Result: 39%

4. Weighted Pop. Density
   - Goal: 15,000 people or more per square kilometer.
   - Result: 10,786

5. Car-Free Places
   - Goal: 100% of residents
   - Result: 26%

**Compare:**

**Contrast results between cities**
How to use Pedestrians First

Analyze:
Download the maps and use them yourself

You can download the maps of these indicators in Washington, D.C. [USA]. The data is stored as geojson files, which can be converted to other formats through a variety of tools, including mapshaper. You can also download a database of cities and their indicator measurements (.csv).

The indicators are also limited by incomplete, occasionally inaccurate data from open sources, which often privileges wealthier cities that have more accurate data. Fortunately, you can help contribute data.

We'd love to hear from you. With your feedback, we can make Pedestrians First even better. If you're using this tool for walkability planning in your city, let us know about your project. If you have any questions, comments, or criticism, we'll try to address them. Contact us.
Population density
(Global Human Settlement Layer)

GTFS (transit)
(OpenMobilityData.org)

OpenStreetMap
(city streets
city amenities
(schools,
healthcare,
car-free areas))

Python:
OSMnx
Geopandas
Rasterstats

Free and open source:
github.com/ITDP/PedestriansFirst

The very technical slide!
How to use Pedestrians First

Walkability:
- Street
- Neighborhood
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How will you use Pedestrians First?

Let us know in the chat!

- ???
- ???
- ???
- ???
Questions?

D. Taylor Reich (they/them pronouns)
taylor.reich@itdp.org
Thank you!

I’ll be sticking around for a few minutes to answer any questions you still have, or show you a demo if you want :-)

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