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Bernard van Leer FOUNDATION

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
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Today's Webinar

1. Why walking matters
2. What is walkability?
3. How to use Pedestrians First

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Why walking matters

Cars + cities = traffic jams

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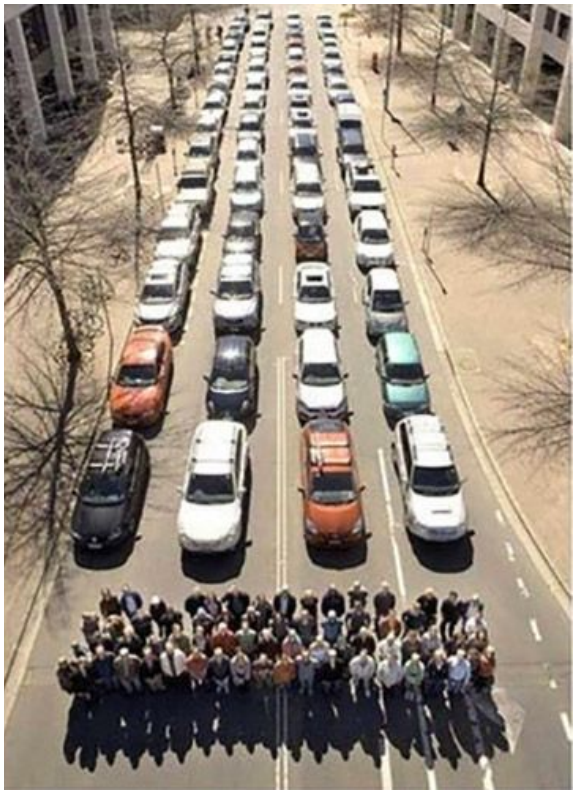
Why walking matters



People take up less space than cars

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Why walking matters

Walking lets people get places

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Why walking matters

Equity, Resilience, Environment, Economy, Health, Society

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Why walking matters

Cities for Babies Benefit Everyone

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Why walking matters

COVID-19 response

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Why walking matters

COVID-19 recovery + future resiliency

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Why walking matters

See the research for yourself:

pedestriansfirst.itdp.org/about
pedestriansfirst.itdp.org/related-publications

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Today's Webinar

1. Why walking matters
2. **What is walkability?**
3. How to use Pedestrians First

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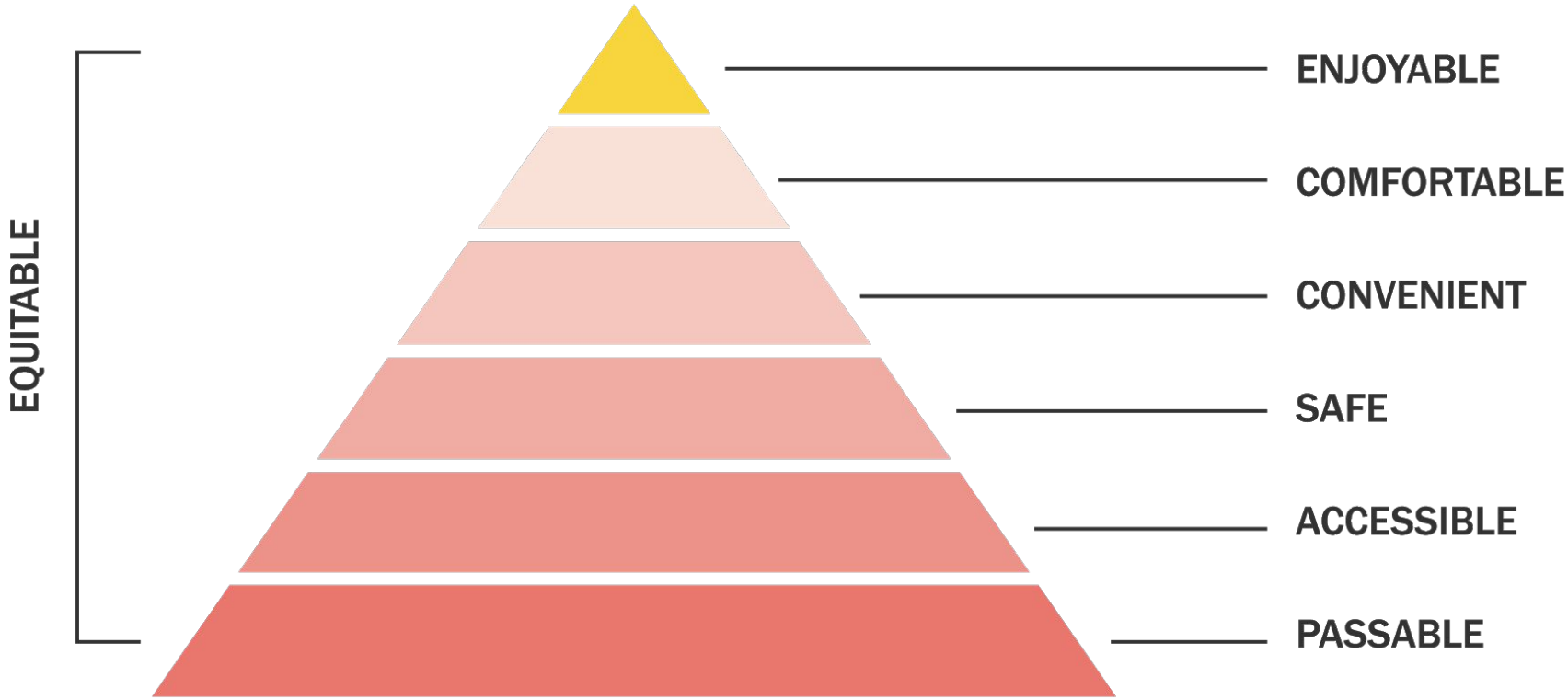
What is walkability?



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What is walkability?

New Jersey:

Footpath:
-Clear
-Wide
-Maintained
Unsafe crossing
No destinations
No people walking

Is this walkable?

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What is walkability?

Addis Ababa:

Blocked footpath
Unsafe street
Many destinations
Many people walking

Is this walkable?

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What is walkability?

Jakarta:

Dense neighborhoods
Quiet, narrow streets
Highways cutting neighborhoods off from each other

Is this walkable?

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What is walkability?

Walkability:

- Street
- Neighborhood
- Transit
- City

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Why another walkability tool?

There are already many tools:

Walkability Evaluation Tools

- ITDP Brazil (2020). **Mobilidados**. [Portuguese]
- ITDP. (2018). **Índice de Caminhabilidade – Ferramenta 2.0** [Portuguese: Walkability Index – Tool 2.0]
- ITDP. (2017). **TOD Standard**. Third edition.
- ITDP. (2017). **Pedestrians First: Tools for a Walkable City**. First edition.
- Collectiu Punt 6. (2015). **Women Working: An Urban Assessment Guide from a Gender Perspective**.
- Duncan et al. (2011). **Validation of Walk Score® for Estimating Neighborhood Walkability: An Analysis of Four US Metropolitan Areas**.
- Centers for Disease Control. (2010). **Healthier Worksite Initiative: Walkability Audit Tool**.
- Krambeck, Holly, World Bank. (2006). **Global Walkability Index**.

See pedestriansfirst.itdp.org/related-publications

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Why another walkability tool?

Pedestrians First is:

Global • Multipurpose • User-friendly • Action-oriented

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1. Why walking matters
2. What is walkability?
3. **How to use Pedestrians First**

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Quick stretch break :-)

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Today's Webinar

Pedestrians First is a **toolkit** that anyone can use

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How to use Pedestrians First

Walkability:

- Street
- Neighborhood
- Transit
- City

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How to use Pedestrians First

Walkability:

- **Street**

Checklist of walkability features for a single street

- Neighborhood
- Transit
- City

Amman, Jordan

Indicator 1: Walkways

Walkways — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — Review

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	○ YES ● NO
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	○ YES ● NO
4. The walkways are easy to use and barrier-free for people with physical challenges. More info	○ YES ● NO

Policy Recommendations +

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How to use Pedestrians First

Amman, Jordan

Indicator 1: Walkways

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Policy Recommendations

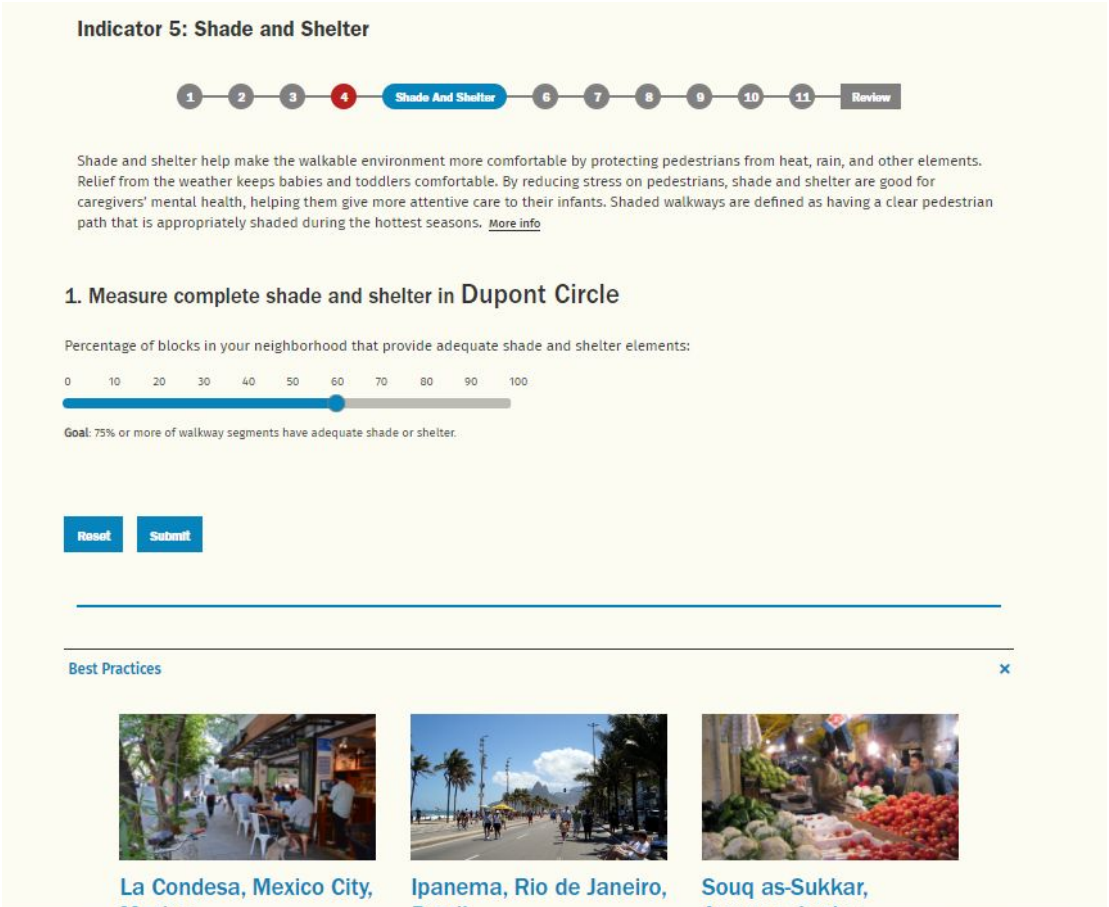
How to use Pedestrians First

Walkability:

- Street
- **Neighborhood**

Self-survey of walkability indicators

- Transit
- City



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How to use Pedestrians First

Walkability:

- Street
- Neighborhood
- **Transit**

Self-survey of inclusivity indicators

- City

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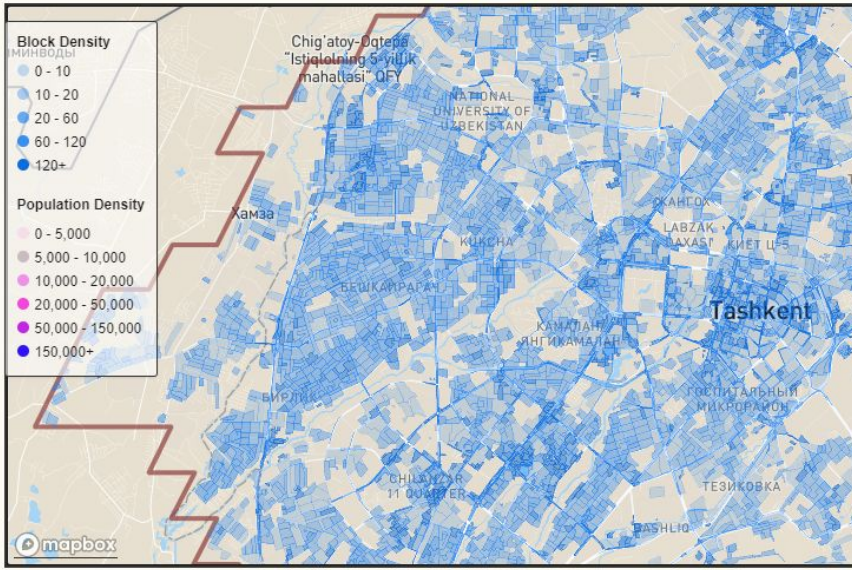
How to use Pedestrians First

Walkability:

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

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



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How to use Pedestrians First

Walkability:

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

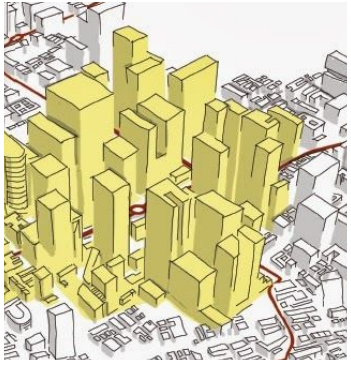
Database of five walkability indicators and maps in 1,000 cities

1: People Near Services

2: People Near Transit

3: Block Density

4: Pop. Density



5: Car-Free Places

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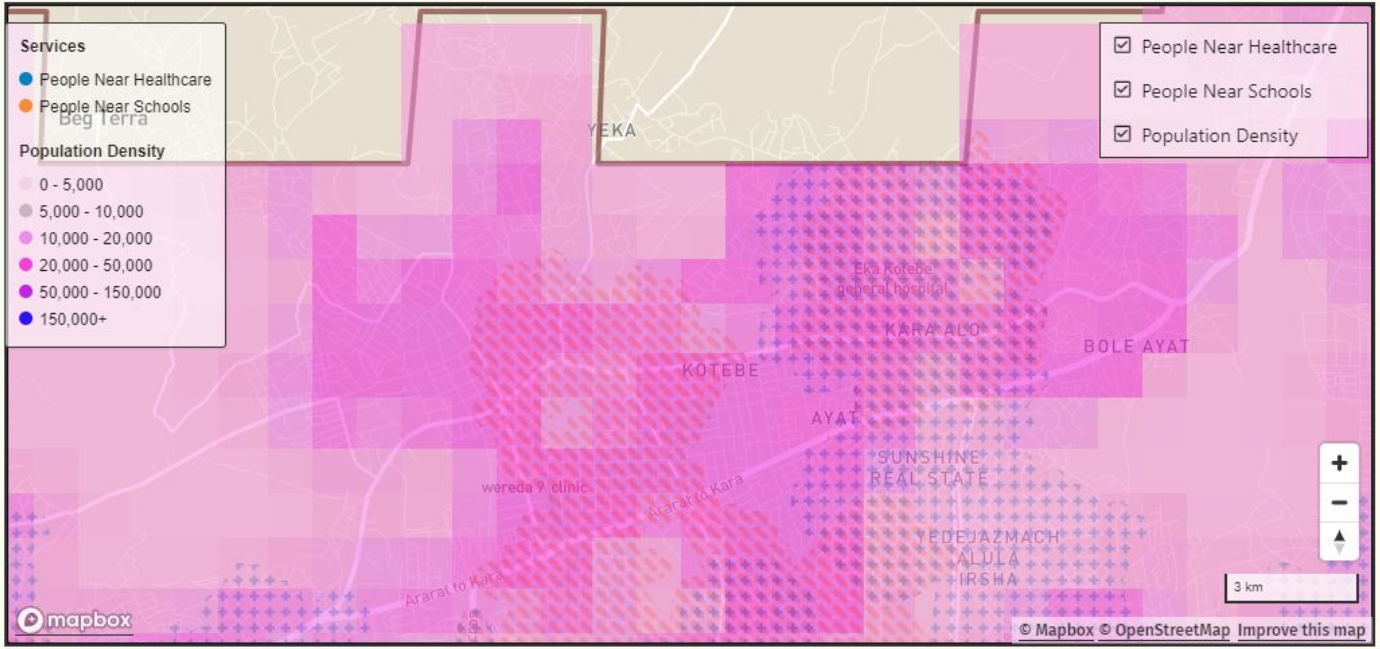
How to use Pedestrians First

Explore:
zoom in on
parts of a city



People Near Services and Population Density
in northeastern Addis Ababa

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How to use Pedestrians First

Compare:
Contrast results between cities

Walkability in Fortaleza [BRA]

1. People Near Services	69%	Goal: 100% of residents
2. People Near Transit	People Near Transit is not available because GTFS information for this city is not available on OpenMobilityData.org.	
3. Block Density	74	Goal: 80 blocks per km² or more
4. Weighted Pop. Density	17,916	Goal: 15,000 people or more per square kilometer.
5. Car-Free Places	19%	Goal: 100% of residents

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Walkability in Tirane (Tirana) [ALB]

1. People Near Services	63%	Goal: 100% of residents
2. People Near Transit	People Near Transit is not available because GTFS information for this city is not available on OpenMobilityData.org.	
3. Block Density	39	Goal: 80 blocks per km² or more
4. Weighted Pop. Density	10,786	Goal: 15,000 people or more per square kilometer.
5. Car-Free Places	26%	Goal: 100% of residents

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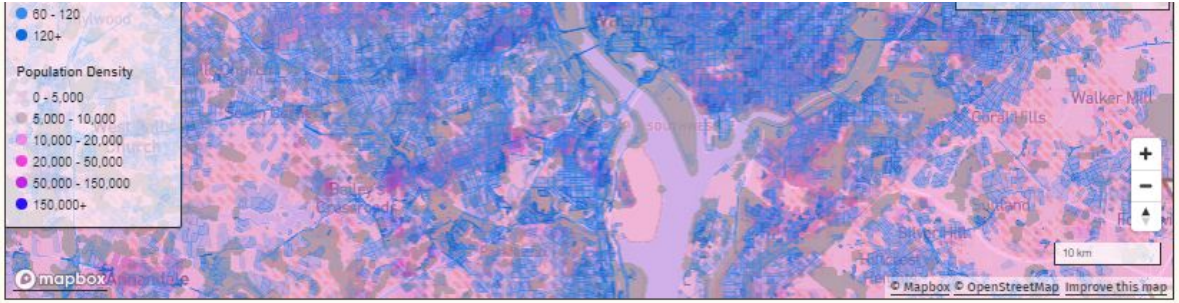
How to use Pedestrians First

Analyze: Download the maps and use them yourself



Share this

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.**

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The very technical slide!

Population density
(Global Human Settlement Layer)

GTFS (transit)
(OpenMobilityData.org)

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

Python:
OSMnx
Geopandas
Rasterstats

PEDESTRIANS FIRST
TOOLS FOR A WALKABLE CITY

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

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How to use Pedestrians First

Walkability:

- Street
- Neighborhood
- Transit
- City

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How will you use Pedestrians First?

Let us know in the chat!

- ???
- ???
- ???

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Questions?

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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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