POLIS

CITIES AND REGIONS FOR TRANSPORT INNOVATION

ANNUAL CONFERENCE 2024

27-28 NOVEMBER 2024

KARLSRUHE (DE)

Baden-Württemberg
Ministry of Transport

Karlsruhe

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ANNUAL CONFERENCE 2024

Building accessibility
with collective intelligence & open-source tools

09:00 AM - 11:15 AM
28 November 2024

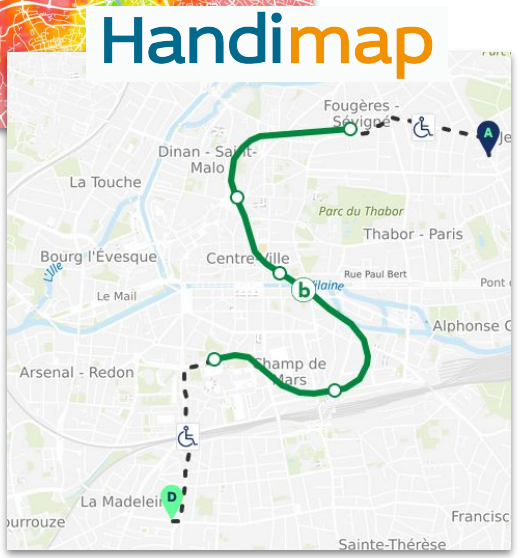
Bertrand Gervais, SOMEWARE

someware

We create digital tools to make cities more walkable and accessible for everyone

- Software to map and analyse walkability/accessibility, so that cities can reallocate street space and rethink their mobility plan with their operators

- The Handimap routing engine (Web API), so that users / travellers / citizens can easily plan customized routes based on their mobility needs



MINISTÈRE CHARGÉ DES TRANSPORTS
Liberté Égalité Fraternité

VILLE DE PARIS

KEOLIS

RATP DEV

VILLE DE QUÉBEC

Nantes Métropole

Montpellier Méditerranée Métropole

Région BRETAGNE

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Walking & Public Transport

LEADING THE WALKING MOVEMENT

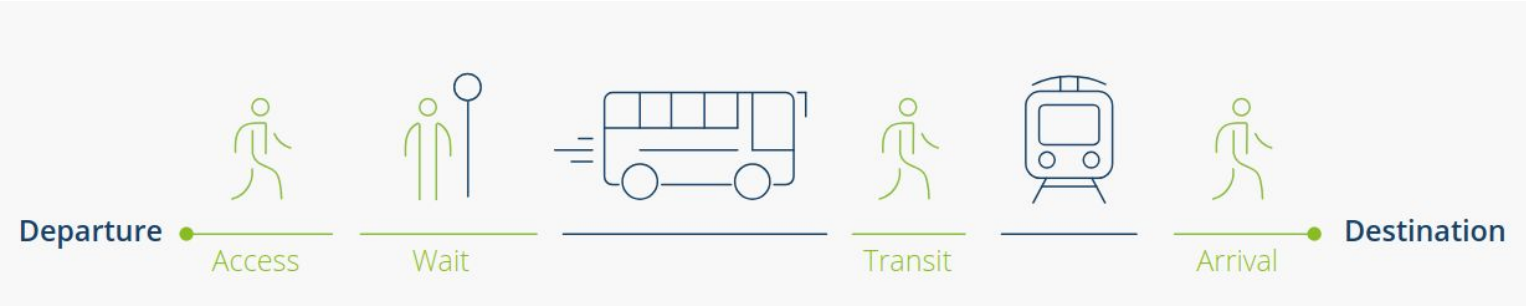
"INTEGRATING WALKING + PUBLIC TRANSPORT"

April 2024

On average

50% of public transport user's trip time

is spent walking or waiting/transferring



Walking & Public Transport

WALK21 LEADING THE WALKING MOVEMENT

Walking that defines 70% of the public transport experience

People are willing to walk longer distances (x3) to access public transport in cities that offer high-quality walking experiences

Introduction to France's Accessibility Initiative for Public Transport

French Mobility Orientation Law (2019)

Make daily transportation more accessible, inclusive, and environmentally sustainable. Among the 5 key objectives:

1. **Promote New Mobility Services**, like Demand-Responsive Transport (DRT).
2. **Reduce Car Dependency**: improve access for disabled people.

Data Accessibility and MaaS

- **All local authorities must map their public transport and street accessibility** according the NeTEx standard within a 200 m radius around main transport stops
  These data must be published on https://transport.data.gouv.fr
- **French Regions must provide route planners that suggest accessible routes.**

The NeTEx Standard & European Passenger Information Accessibility Profile

NeTEx (Network Timetable Exchange): European standard for sharing public transport data (stops, routes, timetables, fares, and indoor/outdoor accessibility)

For accessibility, NeTEx can be used to describe :

- outdoor pedestrian routes (roads),
- indoor pedestrian walkways and facilities
- transport platforms
- vehicles
- facilities

3 levels of accessibility:

1. an assessment of accessibility by major disability family, based on compliance with 'wheelchair accessible' regulations...
2. the available services (toilets, ticket office, etc.)
3. a description of accessibility (routes and equipment)

Key Milestones in Accessibility Achievements

Accèslibre Mobilités

An open-source software, funded by the French Ministry of Transport

Allows local authorities to collect, edit and manage all accessibility information and export it in NeTEx

accèslibre MOBILITÉS

Accessibility Work Groups

Created in 2028

Gather cities, associations, companies to define standards and good practices to map accessibility and compute routes

Acceslibre Mobilites: An Open-Source Tool for Accessibility Mapping

accèslibre MOBILITÉS

Project started in 2022 / Funded by French Ministry of Transport

2 years to create and test a desktop / mobile software suite to map accessibility according to the NeTEx Accessibility standard

Five cities to test the tools :

Aix Marseille Provence Métropole · Communauté d'Agglomération de La Rochelle · Évreux Portes de Normandie · ville Evian · ECLA Lons Agglo

The only tool that can create and manage NeTEx Accessibility data

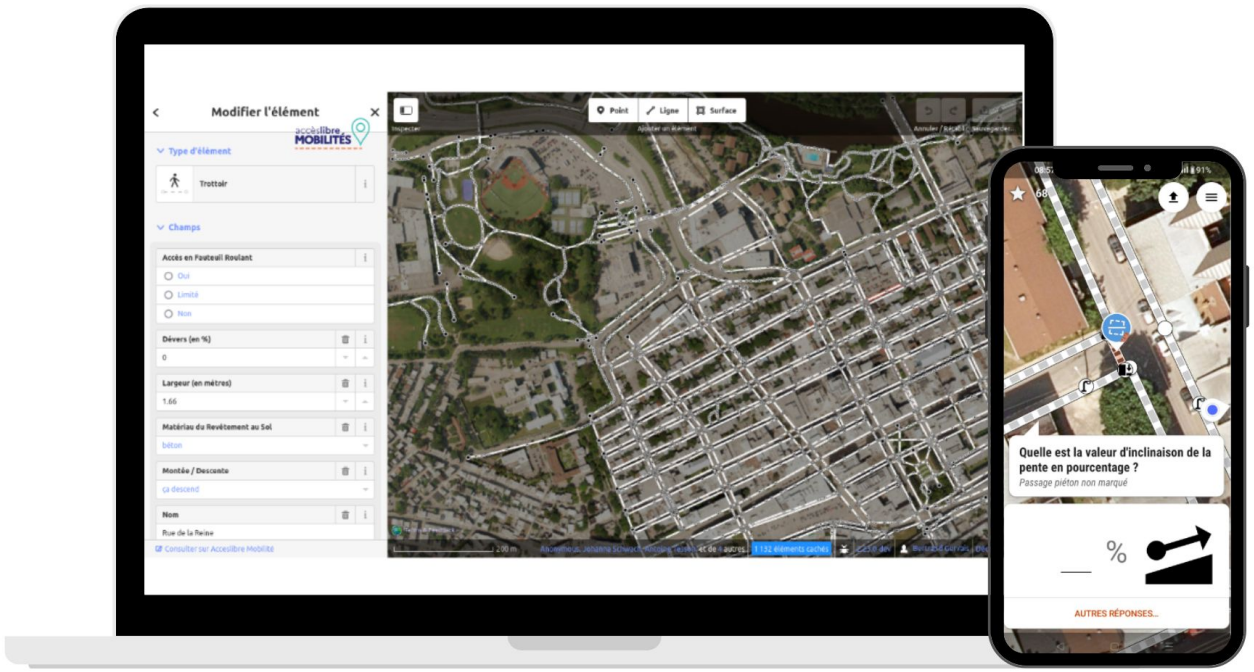
Now used in production in 3 urbans areas (around 3000 km mapped).

Le Mans Métropole Communauté Urbaine · Caen la mer Normandie Communauté Urbaine · Lorient Agglomération

This 3 cities will then use this data to improve their routing engine.

Also tested in Quebec City (Canada).

Acceslibre Mobilites: An Open-Source Tool for Accessibility Mapping



Desktop Web App

Visualize along with city data / 360° images
Create, Validate, Import / Export

Field Data collection App for Professionals

Fill all attributes
Make small fixes on geometries
Take pictures and notes

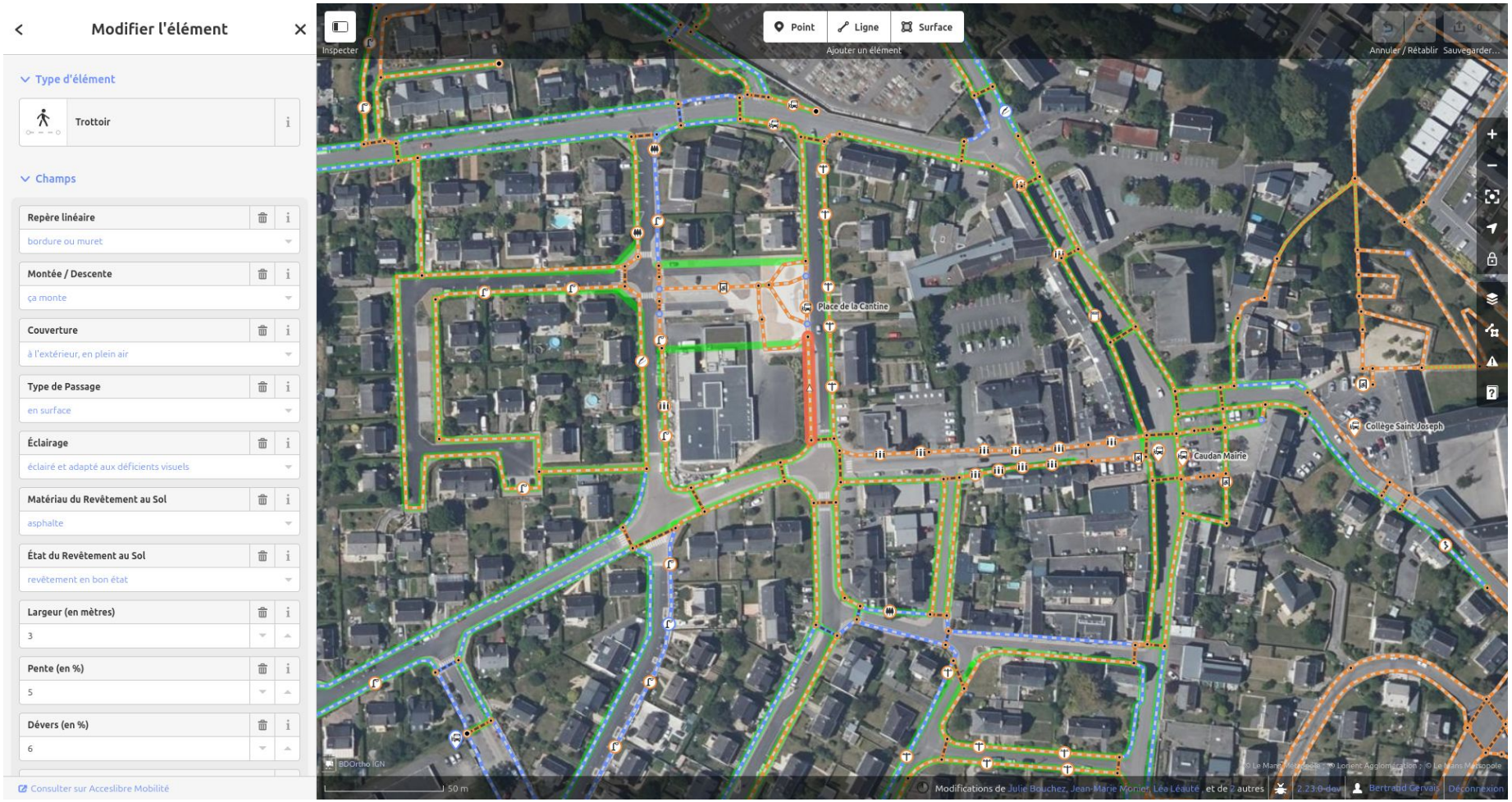
Field Data collection App for Citizens

Fill some attributes
Take pictures and notes
Intuitive UX / ergonomics

Common requirements

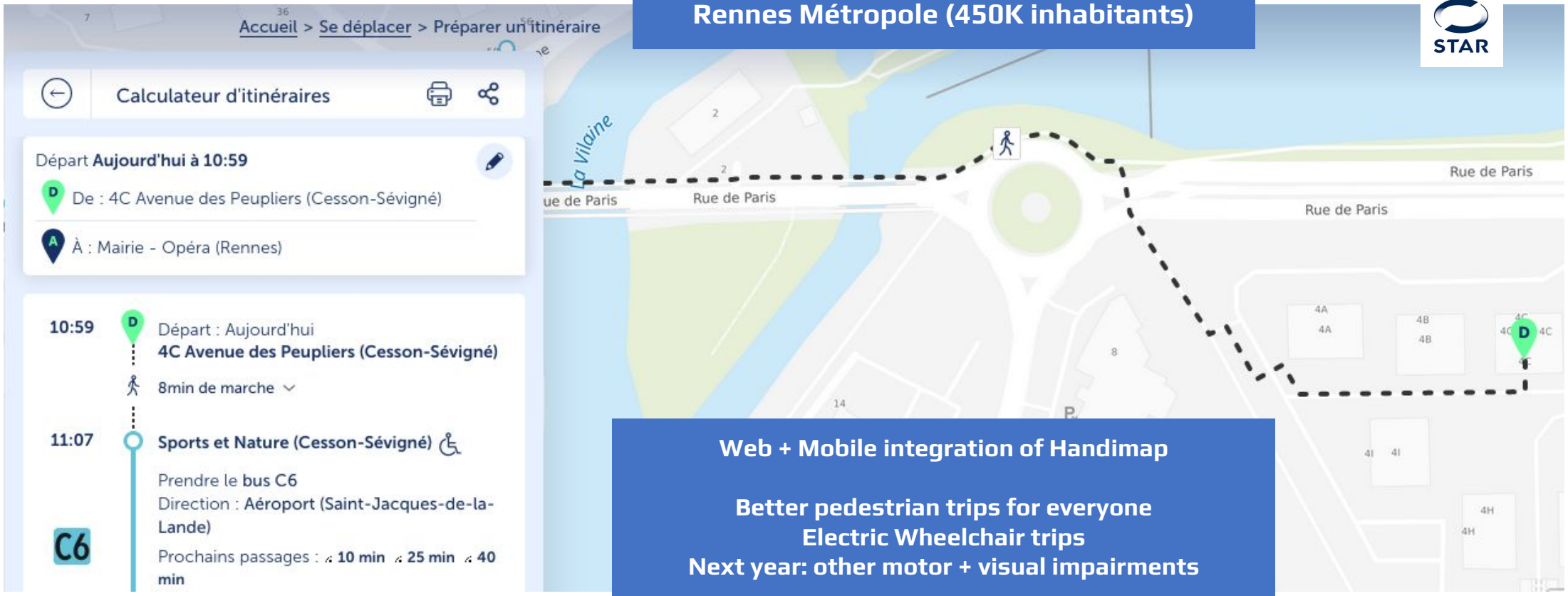
100% open source technology
Can be installed on premise
Multi-user
Multilingual
Data interfaces to integrate into GIS tools

Acceslibre Mobilites: An Open-Source Tool for Accessibility Mapping



Routing using NeTEx Accessibility data

Rennes Métropole (450K inhabitants)



Web + Mobile integration of Handimap

Better pedestrian trips for everyone
Electric Wheelchair trips
Next year: other motor + visual impairments

NeTEx + live data : pedestrian reports, street works

~800K API calls per day / 100K trips

Future Steps for Enhanced Accessibility Across Europe

Test	Explore	Share with us	Let’s build a community to work on it!
AccesLibre Mobilites in your city	The use of NeTEx Accessibility	Your input / feedback to take it to the next level	

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Thank you for your attention!

Bertrand Gervais

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For more information:

www.someware.fr

https://www.ecologie.gouv.fr/politiques-publiques/donnees-daccessibilite

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