URBAN VIND

Passenger travel insights
for public transport.

Information Deck

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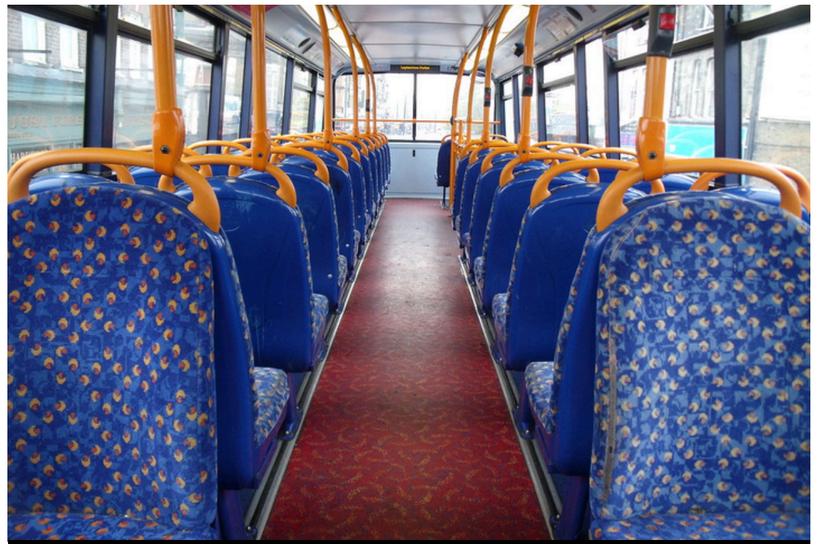
eit Urban Mobility
Co-funded by the European Union

Public Transport Systems are inefficient

Overcrowded

Uncertain wait times



And sometimes empty!

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Reason = Lack of understanding of passenger flows

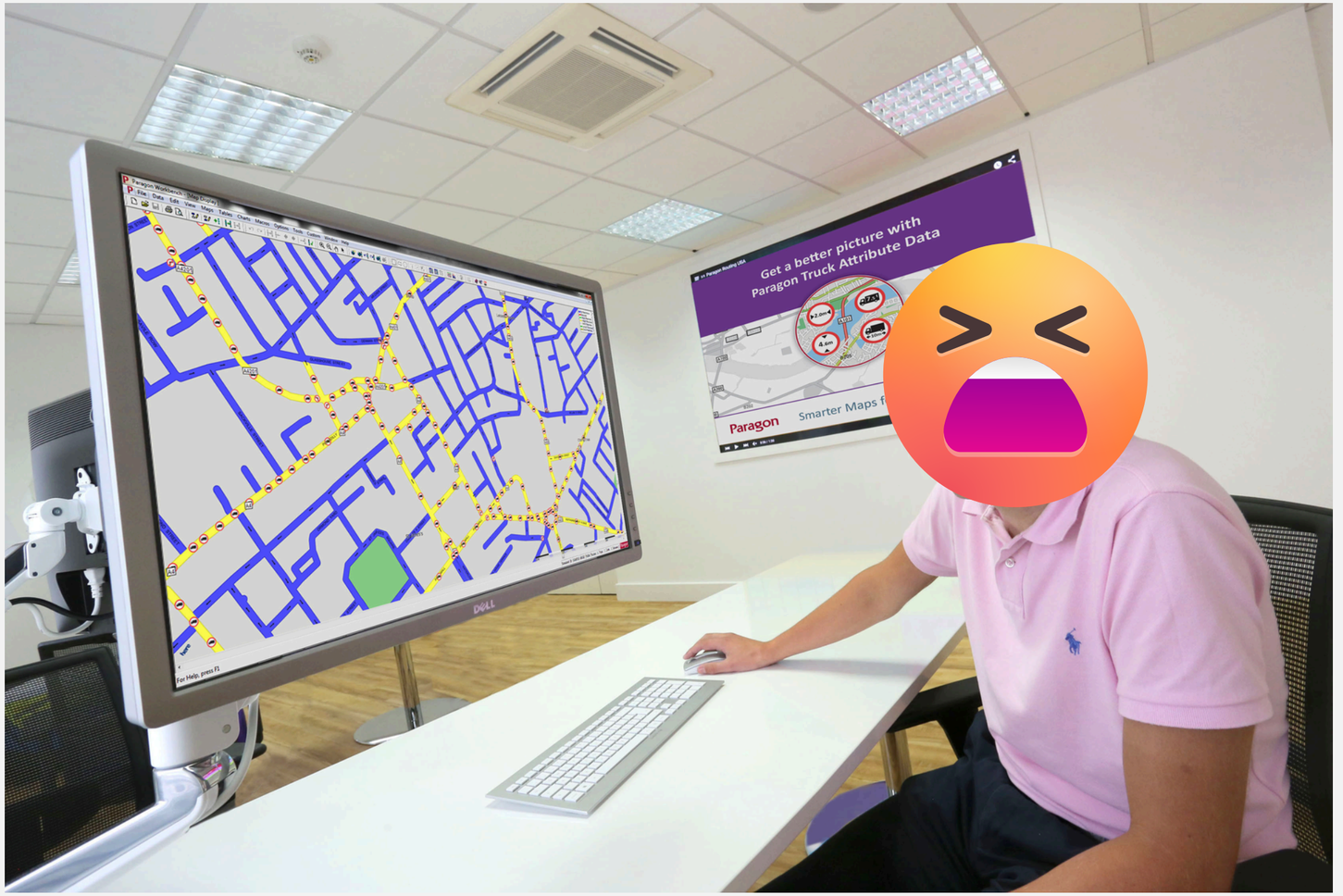
Growing Problem for PT Operators!

Inaccurate understanding of passenger flow leads to

- Poor scheduling
- Overcrowding
- Increased operational costs
- Lower revenue due to lower satisfaction.

74% ↑

Increase in public transport demand until 2050 (source)



Existing solutions cannot perform

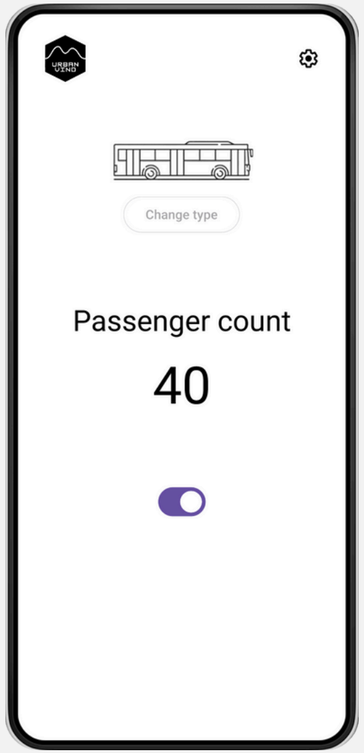
Only counts passengers,

no Origin-Destination

Extremely expensive! up to 10,000€ per bus

Introducing CrowdFlow

A simple software solution to perform real-time passenger counting in buses.



Bluetooth-based scanning solution through an app for bus drivers.

Estimates Passenger count with 90%+ accuracy*

Offers insights into travel patterns.

Disrupting hardware with a simple software solution

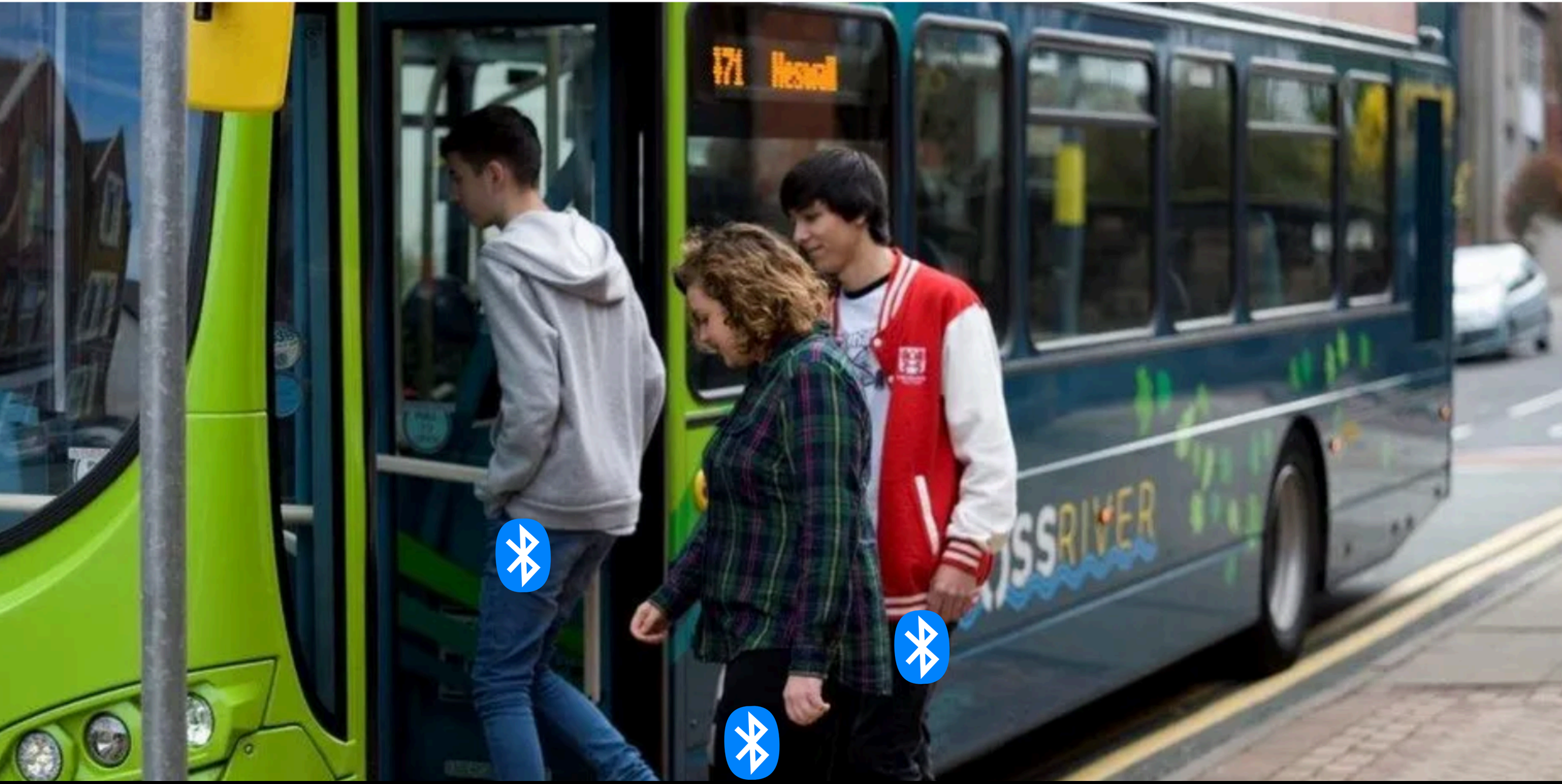
*In Cities with calibration data. Currently consistent 80%+ accuracy without calibration

An easy plug-and-play solution that collects all required data.

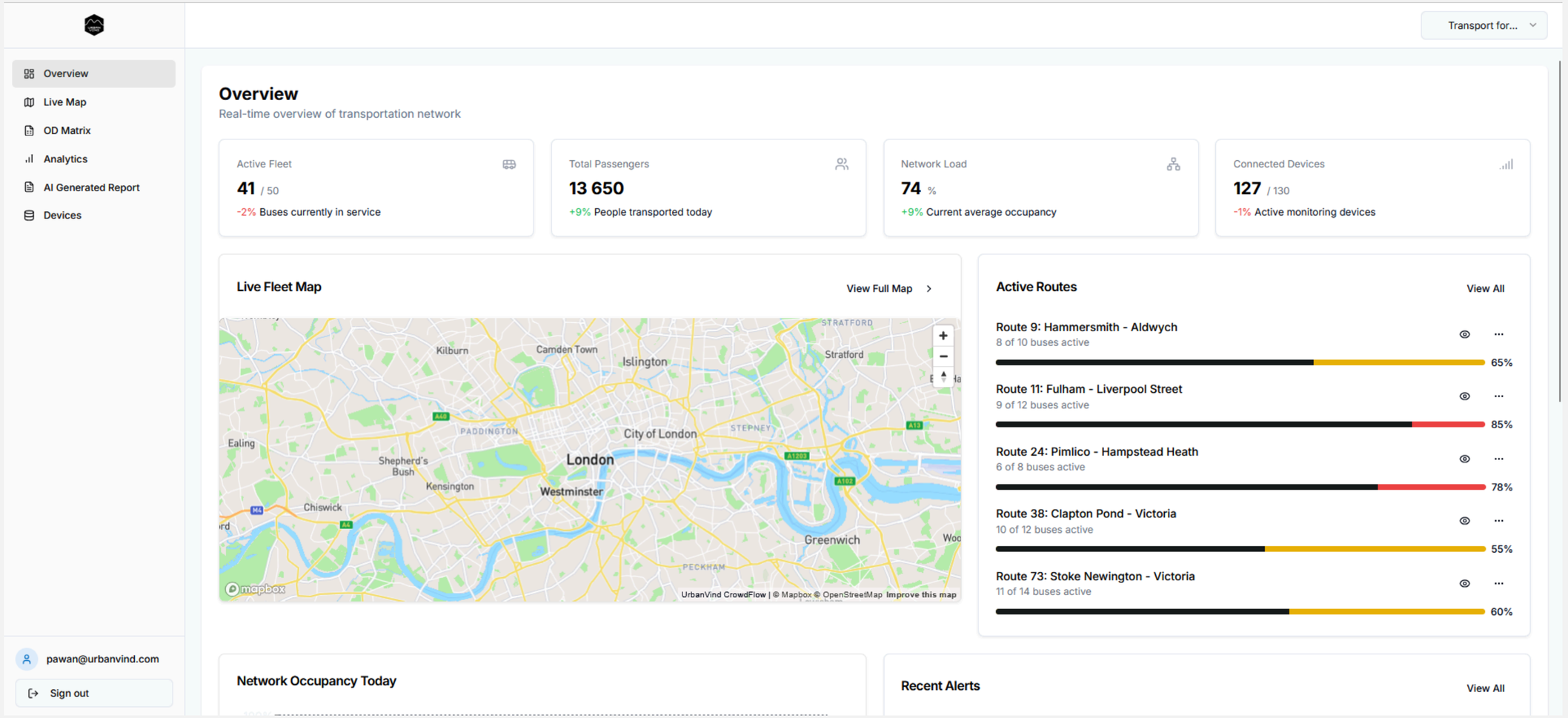
Can be deployed as

1. **An app for Bus drivers**
2. **SDK integrated into Bus Consoles**

Estimates real-time crowding with Bluetooth Scanning! GDPR ✓



Provides passenger travel patterns, including boarding and alighting points



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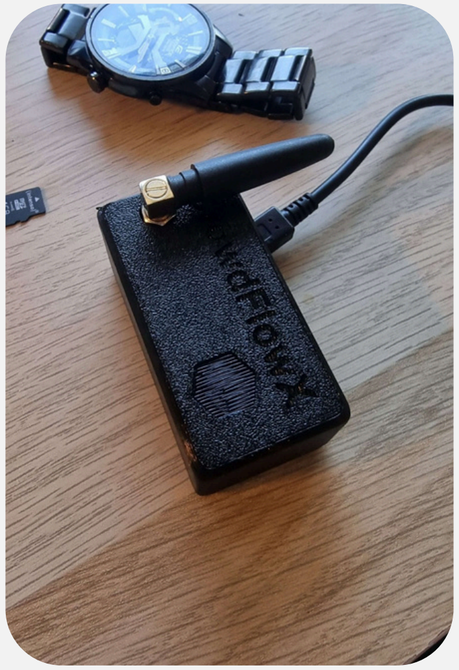
Visualize the data on our Dashboard
or get it via API calls to integrate with own tools

No Driver Phones or Consoles?
Introducing CrowdFlowX

A simple Plug & Play hardware - plugged into a USB port.



Bluetooth + WiFi Sniffing to anonymously estimate passenger count.

Estimates Passenger count with 90% to 95% accuracy*

Offers insights into travel patterns and Origin-Destination.

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Just Plug and Play!

*In Cities with calibration data. Currently consistent 80%+ accuracy without calibration

Better understanding of Transfers

Average wait time of passengers

Comprehensive Origin-Destination Matrices

Pedestrian Flow understnading

Understand Passenger Flow in Bus Stops and Pedestrian Flow in Urban Areas

How do we do this?

Machine learning techniques

a. Fingerprinting

b. Device categorization

c. Estimation of passengers and OD data

100% of data anonymized on the phone/device - GDPR ✓

Competition

Sensor-based APCs

CONSAT

EYERIDE™ ICOMERA AN EQUANS COMPANY iris DILAX XOVIS

	Infrared	CCTV+AI	LIDAR	3D Optical
Passenger count accuracy	Low ←			→ High
Cost (per bus/coach)	$3000 ←			→ $9000
Origin-Destination Data collection	✗	✗	✗	✗

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9.2B €

APCs Market Size

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High accuracy, low cost solution

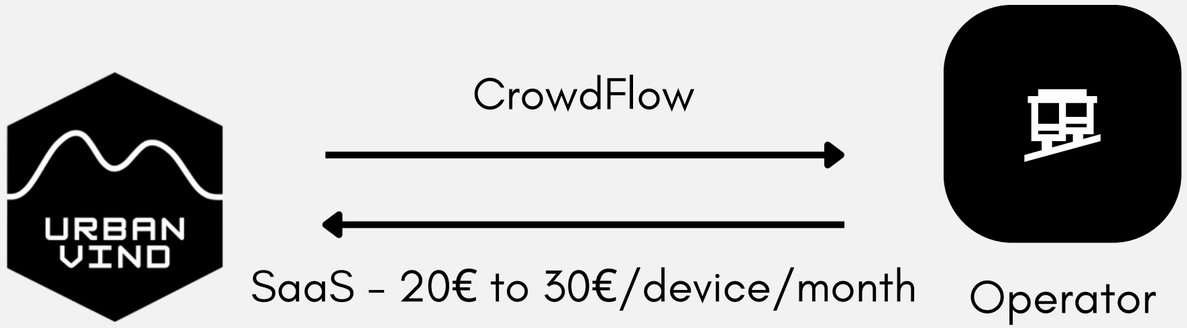
No hardware installation needed

Competition

Other passenger counting systems

Wifi routers	Not everyone connects to it
Passenger apps and Bluetooth beacons	Not everyone’s app is active
Telecom data	Not enough granularity to data
Simulation/Prediction Models	Relies on APC and ticketing data

Business model



Target Market:

1. Public Transport Operators - B2B
2. Public Transport Agencies - B2G
3. Consulting Companies - B2B
4. Ad Agencies - Data monetization
5. Mobility Service Providers - Data monetization

Low operational costs + high-growth SaaS model = scalable revenue.

Market size

Market Potential - focused on Public Transport & Data Monetization

SOM

192 M €

20% of European Market - 300 cities.

SAM

960 M €

800,000 buses in 1348 Cities with a 50,000+ population in EEA, UK, and Turkey.

TAM

5.5 B €

Global Market

Source

Market Trend

13.3%

CAGR!

Overall Smart Transportation Market Size - **150 B$** now **to 300B $** by 2030

Market dominance with Travel Data - The fuel powering the Smart Transportation market!

Source

Traction

Customers/Deals agreed

Nobina

transportes metropolitanos de lisboa
Lisbon, Portugal

SPINVIEW
Consulting firm
Deal for Traffic counting

Pilots

ANTALYA METROPOLITAN MUNICIPALITY
Antalya, Turkey

JŪRMALAS AUTOBUSU SATIKSME
Jurmala, Latvia

Ajka, Hungary

Promising deals in the pipeline

Maribor

KAUNO AUTOBUSAI
Kaunas, Lithuania

Львівська міська рада
Lviv, Ukraine

KIRUNA LOKALTRAFIK
Kiruna, Sweden

Nordjyllands Trafikselskab
North Denmark Region

Kollektivtrafikmyndigheten i Norrbotten
Norrboten County

flibco.com
Your airport connection

västtrafik

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Strong traction and interest across B2B and B2G clients

Roadmap

Jan to July 2024

- Customer Interviews 60+
- Initial MVP out
- Data collection drive

Jan to Apr 2025

- EIT UM Project starts.
- OD Estimation model + pipeline.
- Nobina, Lisbon & Spinview signed!
- CrowdFlowX v2 complete

By Dec 2025

4 to 5 Paid Customers on board worth 200k€ ARR.

2027 - 2030

Growth + exploration of further monetization of Data and Insights.

August to December 2024

- Basic algorithms complete.
- CrowdFlow App developed (75%+ accuracy)

Apr to Dec 2025

- OD Estimation model + pipeline.
- Accuracy 90% Target.
- CrowdFlowX v3
- **UrbanVind AI Launch**

2026

30+ Operators with Added Services + Revenue Streams.

1,5M€ ARR

2030

300+ Operators in Europe with start of global expansion. 50 to 100M€ ARR

Exit

Core Team

Pawan Seshadri Venkatesh

CEO & Cofounder

Ex-mobility consultant with start-up experience
transport engineer
inventor with patent & publications

Ivo Cornelis de Geus

CTO & Cofounder

mobility & data engineer, mobility consultant and
awarded data scientist

Kiran Sunil

Data Scientist

Masters in Data Science
3 years experience as Data Scientist

Vanessa Macchiavello

Work Student - Backend Development

ex-IKEA, skilled in Backedn dev and Cloud development

Pookhao Chinpongsuwan

Software Developer (Part-Time)

Engineer, EIT UM Masters student and skilled in software development.

Young & Expert team bringing Innovation to Public Transport.

Advisors

Dr. Zhenliang Ma

Reputed professor in ITS, focusing on public transport optimization and Machine learning.

EIT UM Project Advisor

Alexander Høst Frederiksen

Cofounder & ex-Chief Sales Officer of Donkey Republic, Member of Expert Council at Ministry of Transport in Denmark, expert in B2B & B2G Sales.

Startup Advisor with Advisory shares

Shareholder Structure

Pawan Seshadri Venkatesh (CEO) – **48,35%**
Ivo De Geus (CTO) – **48,35%**
Pim Welting (ex-co-founder) – **2%**
EIT Urban Mobility – **1%**
Alexander Host Frederiksen – **0.3% (Advisory)**

EIT UM's 155,000€ in Investment is under a SAFE agreement with 20% discount rate and no valuation cap.

Why now?

More BLE penetration - FindMy Device protocols

Market readiness — closer to demand driven public transport - more data needed

More Electrification = More need for optimization in all levels

AI Advancement with ML / RL techniqiues

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Competitors using similar Tech

Established - WiFi only

New - WiFi only

Not very aggressive

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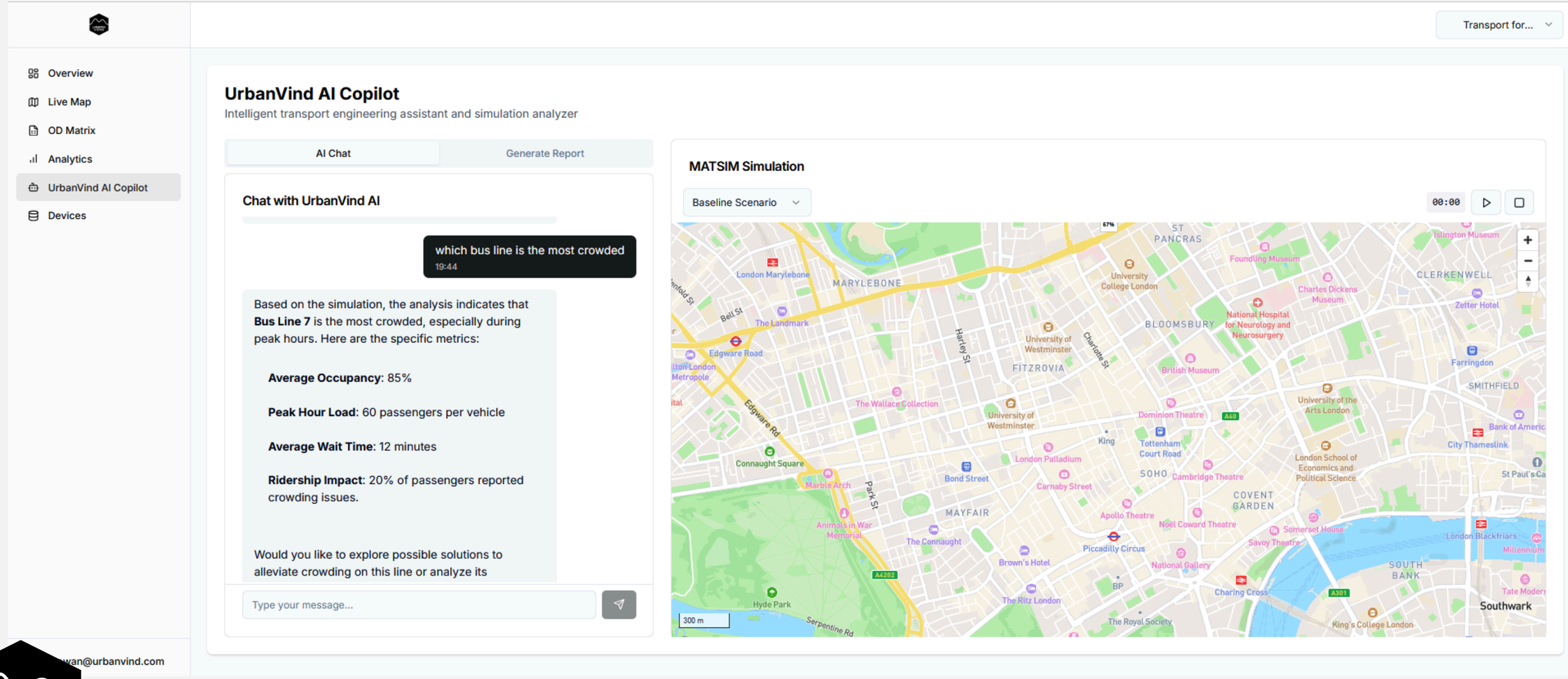
Why us?

Plug & Play Aspect

Aggressive with competitive pricing
so we can monetize on insights later!

Solving the “Consultant reliance” problem with an end-to-end solution beyond CrowdFlow with UrbanVind AI - 10x more Revenue potential!

UrbanVind AI - sneak-peek



Work in Progress!

The Ask

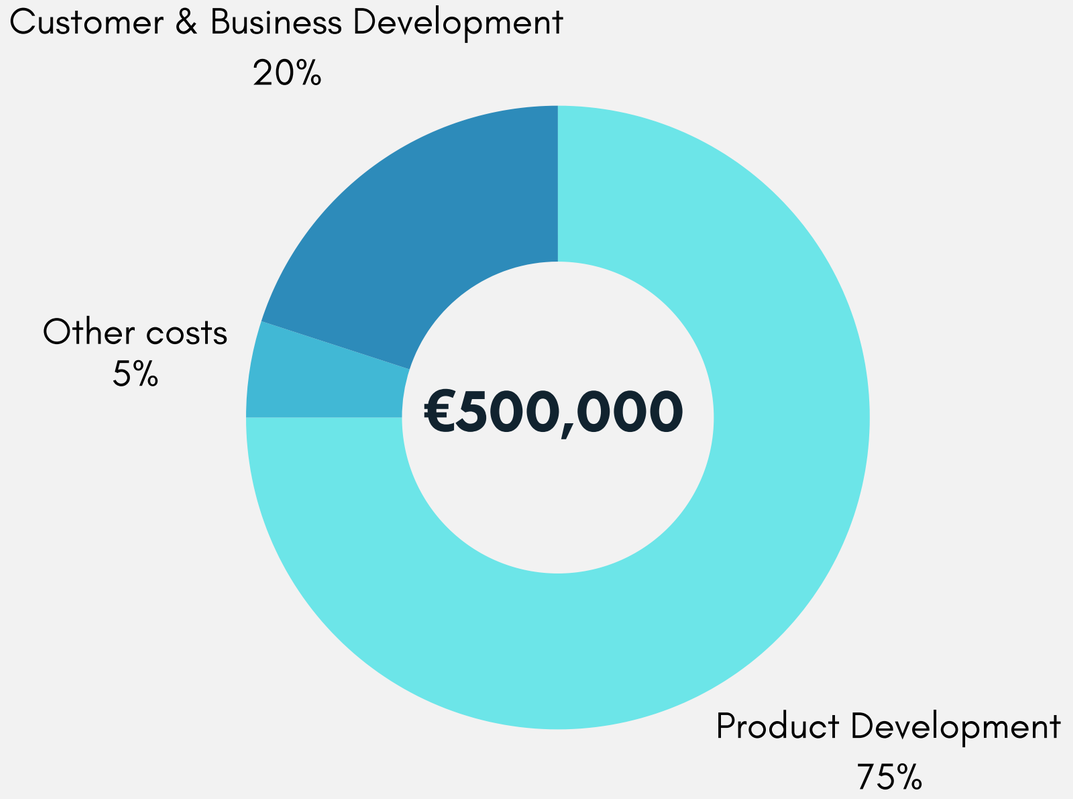
Pre-Seed Round: 500,000€.

Investment of 155k€ Secured - **EIT Urban Mobility Project**

VC - Advanced discussion in Progress **- Hyperlight Ventures (25k€ soft commitment), Mobility Fund, 10investments.nl (offer received)**

Next steps:

- Set up for 2 year unaffected runway
- Hire Development team.
- Convert Pilots into paying customers.
- By December 2025 - 200,000€ ARR Target.
- By 2026, 1,500,000€ ARR target.



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Want to know more? **urbanvind.com**

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Transit data, made simpler.

FAQ & Appendix