Enjoying public transportation in your city?
Because of poor public transport passengers have to use personal cars in thousands of small towns around the world.
Your options in a small town:
Own a car (or cars), get a ride or just walk
Tunnll: ORDER the system where you need to go to.
Tunnll optimizes existing bus networks.

FIXED ROUTES, DYNAMIC TIMETABLE.
Tunnll knows from and where to every passenger wants to travel at any given moment.
Instead of picking up 1-2 passengers at each stop, Tunnll joins passengers in groups that gather at bus stops that are placed along the fixed bus lines dynamically. The bus serves the whole group at once.
The more popular a bus route is at any given moment, the more buses Tunnll sends to serve this bus route.
Tunnll shortens bus lines in real time to avoid trips to empty bus stops. Tunnll adds more bus stops at the end of the bus route if necessary.
Public transport in small cities around the world

More than 1000 small cities around the world where
- waiting time is more than 20 minutes
- not affordable fares
- inconvenient bus stops

Service Addressable Market (SAM): €9 billion.
Tunnll aims to reach 5% of SAM within 5 years.
# Pilot: La Bisbal del Penedès, Spain

Previous transport operator’s schedule

<table>
<thead>
<tr>
<th>PARADA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre metge</td>
<td></td>
<td></td>
<td>8:37</td>
<td>9:37</td>
<td>10:37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IES Baix Penedès Nord</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14:55</td>
</tr>
<tr>
<td>Poble Bisbal - Riera</td>
<td></td>
<td></td>
<td>7:40</td>
<td>8:40</td>
<td>9:40</td>
<td>10:40</td>
<td>11:45</td>
</tr>
<tr>
<td>Poble Bisbal - Pl. Catalunya</td>
<td></td>
<td></td>
<td>7:42</td>
<td>8:42</td>
<td>9:42</td>
<td>10:42</td>
<td>11:47</td>
</tr>
<tr>
<td>General Romagosa</td>
<td></td>
<td></td>
<td>7:44</td>
<td>8:44</td>
<td>9:44</td>
<td>10:44</td>
<td>11:49</td>
</tr>
<tr>
<td>Logroño / Segovia</td>
<td></td>
<td></td>
<td>7:46</td>
<td>8:46</td>
<td>9:46</td>
<td>10:46</td>
<td>11:51</td>
</tr>
<tr>
<td>Av. Priorat / Huesca</td>
<td></td>
<td></td>
<td>7:49</td>
<td>8:49</td>
<td>9:49</td>
<td>10:49</td>
<td>11:54</td>
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</tbody>
</table>
PILOT: LA BISBAL DEL PENEDÉS, SPAIN

Location: Tarragona, Spain

Population of about 3,500 people

Pilot service launched:
Full-fledged public transportation
### PILOT: LA BISBAL DEL PENEDÉS, SPAIN

<table>
<thead>
<tr>
<th></th>
<th>Previous transport operator</th>
<th>Tunnll</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town’s Annual Budget</td>
<td>70 000 €</td>
<td>70 000 €</td>
</tr>
<tr>
<td>Waiting time</td>
<td>1 hour</td>
<td>20 min</td>
</tr>
<tr>
<td>Distance to a bus stop</td>
<td>800-1000 m</td>
<td>max 400 m</td>
</tr>
</tbody>
</table>

*Ridership increased by 34%*
**MORE GROWTH**

**SWEDEN**

- **Pilot approved** for the Town of Härnösand

- **Partner**: Björks & Byberg
  - more than 900 buses
  - 1200 drivers

**SPAIN**

- **Support**:
  - Barcelona Activa
  - Government of Catalonia

- **Partner**: the Association of Municipalities for Transport and Urban Mobility
  - 89 small towns in Catalonia

**GREAT BRITAIN**

- **Partner**: Catapult Transport Systems

- **Next pilot**: the city of Milton Keynes
## More Growth

<table>
<thead>
<tr>
<th>Towns implementation plan</th>
<th>100 towns in 2 years, 500 towns by 5th year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding source</td>
<td>Venture capital: $4M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key financial figures – 5 years total</th>
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<tbody>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>EBITDA</td>
</tr>
<tr>
<td>Margin</td>
</tr>
</tbody>
</table>
BENEFITS FOR OUR RIDERS

- Allows any passenger to request any bus with a smartphone.
- Makes high-quality public transit affordable to lower-income people.
- Cheap, reliable, convenient, comfortable transportation anywhere in the city
- Reduced stress; no constant worry about a personal car or the rush to accommodate a set bus schedule
BENEFITS

Tunnll — a pain killer for cities, passengers, and local businesses in small towns

Solving cities' pain:

- Provides more coverage for all city areas by using the same buses and drivers more efficiently
- Social inclusion: from 0.9€ for a single ticket. Tunnll can be used even by low-income individuals and families many times a day.
- Best value for money for the city budget compared to the traditional public bus system
- It is multi-modal: a Tunnll-enabled bus service can be integrated with trams, Bus Rapid Transit and even the schedule of the local train station

Solving local business' pain:

- Get more paying customers: passengers get free rides if they buy from the Tunnll’s partnering shops
LET US BE PARTNERS

- Sign a simple agreement between the city and Tunnll
- Start a pilot service based on Tunnll technology
- Tunnll starts providing the service to the limited group of early passengers
- Tunnll generally opens the service to the general public
**TEAM**

**SOFTWARE DEVELOPMENT**

- Viktorija Sernevich
  - UI/UX designer
  - Designing screens features, creating user flows

- Pronay Das
  - UI/UX consultant
  - User interface design & functionalities

- Natalia Tretyakova
  - Software Engineer
  - Development, testing & deployment

- Johannes Riandy
  - Software Engineer
  - Programming tasks

**BUSINESS & GROWTH**

- Peter Nilsson
  - Business development
  - CEO Capee Group (Big Data)

- Radu Jitaru
  - Innovation Manager
  - Romania
  - Grant writer & business growth

- Marta Roczniewska
  - Business Manager
  - Expert in data analytics & corporate governance

- Pronay Das
  - Business Manager
  - General administration, PR, Customer relations

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**Tunnll Team: International Distributed Experienced**

Watch the video introducing each of the team members (commercial and technical) that will be participating Tunnll's market uptake:

https://youtu.be/91H_mCDPsk4

The whole team will be 100% committed during the accelerator.
Tunnll

An intelligent mass transit system for any small town, a personal bus for every citizen.
Tunnll

An intelligent mass transit system for any small town, a personal bus for every citizen.
Tunnll

An intelligent mass transit system for any small town, a personal bus for every citizen.

Global impact for 1000+ cities and towns

+ Your town
or + your investment
How much resources are needed to travel around the city?

Comparing modern urban transportation systems in terms of greenhouse gas emissions and occupied road space

50 passenger trips emit

On a daily basis a single car is used by 2-3 people. Therefore, compared to other vehicles more often than needed to transport the same amount of people. This causes traffic jams and high emissions.

Tunnll-enabled bus service

Tunnll is a cyber-physical system of satellites, cloud services, and other technologies. It is effective in terms of passenger allocation and produces fewer emissions.

Public Bus Service

Conventional public buses suffer from the well-known problem of "bus bunching". A large fleet of buses is used to serve all the routes, even if the service demand is low. This leads to inefficiency in terms of passenger allocation and produce a significant amount of emissions.

tunnll.com

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