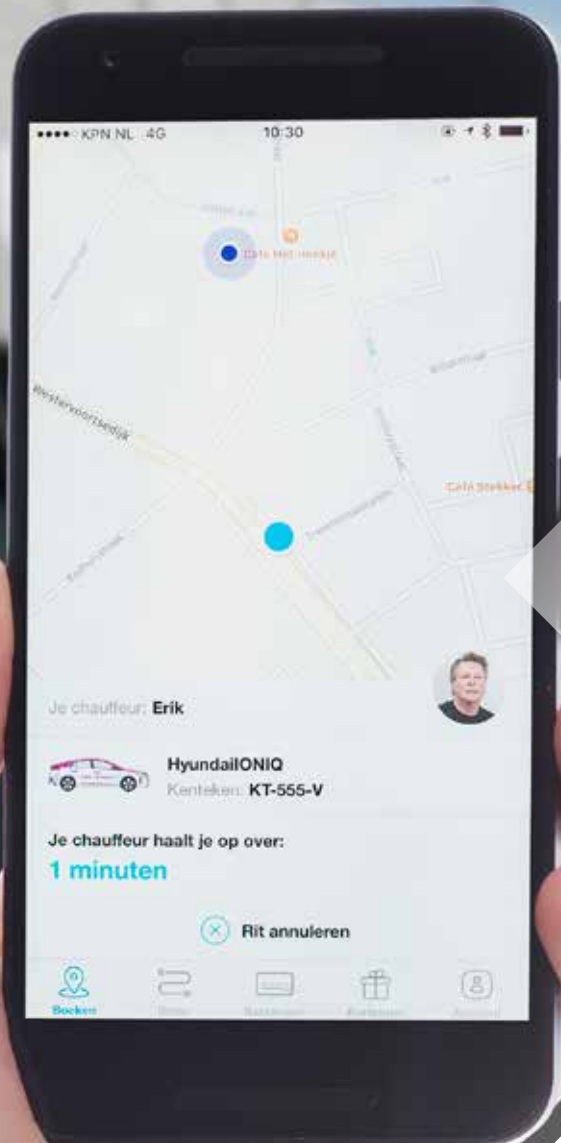


Portfolio of expertise

FIRST- AND LAST-MILE SOLUTIONS



Connecting new lines, together.



Drawing from our long experience as a multimodal operator, we look forward to assisting you with the construction and optimization of your mobility systems and services.

Our ambition is to develop with you, in a genuine spirit of partnership, customized, safe, effective and responsible transit solutions that are adapted to your needs and constraints and closely in tune with customer expectations.

The mobility of the future will be personalized, autonomous, connected and electric. This is our firm belief. Innovation is at the heart of our approach, in order to constantly improve the performance of public transportation services and make the promise of “new mobilities” a reality, for everyone.

As well as uncompromising safety, which is our credo, our overriding concern is the satisfaction of our customers and the quality of their experience. Every team member in the Group engages on a daily basis to meet these challenges and implement solutions both for today and for the future...»

Thierry Mallet
Chairman & Chief Executive Officer

Connecting the Dots: A new age for first- and last-mile transportation

Traditional public transit—bus, light rail, and metro—works best in dense downtowns and inner suburbs. Until now, those networks have often left large gaps as they move to lower-density neighborhoods, forcing passengers to use their own vehicles or walk long distances for the “first and last mile”—the distance between their origins or destinations and transit stops.

First- and last-mile gaps mean poor service and access. Research in the US shows that needing to walk more than 0.8 kilometers (0.5 miles) to the nearest transit stop reduces trips by around 90 percent.¹ Traditionally, this has put transit agencies in a conundrum: either expand fixed-route bus lines at high costs and with low frequencies, or tolerate poor services for low-density areas.



Power to the passengers

In the past, riding transit often meant you had to accept whenever the bus or train came along (or didn't). That has changed.

Passengers can now choose the vehicle that's right for them, just when they need it, with their smartphones. Combined with a new willingness to share just about everything—from houses to bicycles—this has led to an explosion in ways to get around. Shared, on-demand vehicles are the foundation for new opportunities in closing the first- and last-mile gap. It starts with shared rides in cars or vans, together known as micro-transit. Vehicle capacities range from 4 to 15 passengers or more. Because they are smaller than buses, cars and vans can run at a higher frequency while reducing costs—delivering convenience for passengers and savings for the public. As technology improves, new mid-size autonomous vehicles are also beginning to establish themselves as options for the first and last mile.

New car sharing services are playing a role as well. Many systems allow users to pick up a car where they need it, and drive it to their destination, leaving it there for the next customer. Finally, bike sharing is well suited for connecting

passengers to transit stops. Globally, hundreds of cities now have bike sharing systems, and hundreds of millions of people use shared bikes every year.

Together, these solutions give cities powerful new mobility tools that are well targeted to the first and last mile. There's no one-size fits all. Rather, a well-designed solution must respect local wants and needs, melding with the city's infrastructure and respecting differences in weather and geography.

Transdev has expertise in all these modes, and in integrating them with traditional public transit

Transdev operates more transportation modes (from buses to bikesharing) and services (from call centers to technology platforms hubs) in more countries (20 countries) than any other company in the world. Our operations span from dense urban areas to rural communities, and everything in between. This combination of expertise makes us extremely well positioned for first- and last-mile innovation. We know how to develop these services that solve headaches for passengers and budget crunches for cities.

¹ Bouton, S., et al (2017). «Public-Private Collaborations for Transforming Urban Mobility», McKinsey Insights Report, McKinsey Company, available at www.mckinsey.com.

Good reasons to choose Transdev



Integrated with transit

Seamless transitions between modes

As an integrated, multi-modal transportation provider, we have a role in service planning and scheduling for cities on five continents. We've studied deeply first- and last-mile solutions for the systems we manage. In Avignon, France, our Popcar carpooling platform runs two routes that bring passengers to the most common transit stops, as well as to job centers (with more than 300 businesses) not served by transit.

The right fit

Vehicles of all shapes and sizes

We have designed and operated systems for carpooling, bikesharing, carsharing, and micro-transit. Our micro-transit systems use everything from standard four-door cars, to 15-passenger vans, to various types of autonomous vehicles. Our international reach and experience means that every local Transdev team is backed up by truly global expertise, regardless of the vehicle type. In Tampa, Florida, our first- and last-mile solution, HyperLINK takes people to and from key bus stops in a three-mile radius.



Tailored to you

Bringing it all together for the best local service

There's an explosion of new options for first- and last-mile travel, so it's sometimes difficult to know the best technology and where to deploy it. Transdev can help develop a solution that fits with your community, balancing convenience, cost, and user experience. We designed our two first- and last-mile pilots in Sydney, Australia, specifically for two neighborhoods: one brings passengers to and from the local ferry terminal—the other serves shopping centers as well as transit stops.

Accessible

Solutions for passengers in wheelchairs and without smartphones

Transdev is committed to providing top-notch service to all our passengers. Many of our solutions provide equal service to passengers in wheelchairs or without smartphones. For example, our HyperLINK in Tampa, focuses on providing shared rides to and from bus stops. The service is fully wheelchair accessible, and we offer booking choices that work for everyone: use our tailor-made app or call in and reserve a ride by phone.

Autonomous expertise

The cutting edge of self-driving technology

Autonomous vehicles (AVs) are ideal for first- and last-mile deployments. They can operate all day and are well-suited for short-range loops, including in mixed traffic with other vehicles. And this is how PTAs see things too; In 2018, after having been surveyed by Transdev on their priorities in 5 countries, Transit Authorities have ranked AVs as THE first- and last-mile solution: 61% in Australia and New Zealand, 52% in the US and 43% in Canada.



World-class software

Proprietary and customized technology

Our teams have developed best-in-class options for all elements of a modern first- and last-mile technology solution: from the app skins that the user sees to the dispatch software that ensures vehicles arrive on time. With Transdev, our flexibility means you're not locked in. Rather, our three Tech Centers in France, the United States, and the Netherlands work closely together to deliver the right technology for your city.

Own your data

The knowledge and analysis you need

At Transdev, we want cities to build successful mobility networks, and every piece of data is a powerful tool. That's why we're happy to let you own all the data we collect—your success is our success. For Toronto, Canada, we built the Triplinx app, which integrates real-time information and planning for 12 transit agencies. Triplinx integrates first- and last-mile transportation, such as bikesharing, and the transit agencies own all the data.

Intuitive experience

Ticketing and real-time information on appealing apps

Technology should make things easy. Our apps are appealing and intuitive, allow booking and payment, give updated account information, and provide real-time vehicle locations. Together, this means an integrated digital experience for the passenger. In the United States, Australia, and the Netherlands, users rate our first- and last-mile apps 4.85/5 or better.

Here Today, Better Tomorrow

Autonomous transportation services for the First and Last Mile



Pioneer in operating shared autonomous mobility services

Transdev has operated autonomous transportation services for the first and last mile since 2005, when we pioneered Rotterdam's groundbreaking ParkShuttle. These first-generation AVs operate on fixed paths in their own designated roadways. However autonomous technology has come a long way since then, and Transdev has stayed at the cutting edge. We are now among the world's largest operators of AVs in commercial service.

Around the world, Transdev carries more than 3,000 passengers in AVs every day, and we've moved over 2 million passengers since 2005. Our experience has shown autonomous transportation services are particularly well-suited to closing the first and last mile gap, especially between a station or a stop and a business center, a campus or a business park. This was the case in Rungis, as part of the first commercial contract for an autonomous shuttles service on open roads in Europe. A service was set up to allow employees of the Icade Orly-Rungis business park to reach the different institutional catering places within the park.

Global partnerships

We know the value of having the right partners, especially in a rapidly developing field. That's why we've teamed up with the world's most important technology companies and research institutes. For example, we have partnered with the Renault-

Nissan-Mitsubishi Alliance, the world's leading light vehicles manufacturer, a pioneer in electric vehicles.

These partnerships are already bearing fruit, and delivering value for our clients. In France, the «Rouen Normandy Autonomous Lab» project, composed of six public and private partners and coordinated by Transdev, is Europe's first on-demand, autonomous mobility service, using a fleet of 5 autonomous electric vehicles: 4 Renault ZOE vehicles and 1 Lohr i-Cristal shuttle. The objective is to offer autonomous transportation service in an urban area, allowing travelers to reach their destination in the 'Technopole du Madrillet' district or to join the tram station from this area during the day. passengers can book their trips directly via an application.

The Right vehicles for your city

More than any other company, Transdev is deeply familiar with the full range of AVs, as we are the only transit operator to deploy AVs from more than three vendors and propose a multi-manufacturer positioning. Together with the manufacturing company Lohr, we are developing our own autonomous electric vehicle for launch by the end of 2018: the i-Cristal. We are adding our expertise in autonomous operations to Lohr's experience designing and manufacturing electric vehicles. The result is a new type of autonomous vehicle fully accessible and designed for a shared ride. Transdev's global experience means that we know the ins and outs of every AV, and can deliver and operate the one that will work best for your city.

As an operator and global integrator of mobility,
**Transdev gives people the freedom to move whenever
and however they choose.**

We are proud to provide 11 million passenger trips everyday thanks to efficient, easy to use and environmentally-friendly transportation services that connect people and communities.

Our approach is rooted in long-term partnerships with businesses and public authorities, and in the relentless pursuit of the safest and most innovative mobility solutions.

We are a team of people serving people, and mobility is what we do.

We are The mobility company.



