

## Bus rapid transit





# 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** 

**Chief Executive Officer** 

## Buses shift up a gear

Inspired by North and South American bus rapid transit (BRT) operated on highway dedicated lanes, the high quality bus service concept (BHNS in French) is both innovative and efficient. It combines the benefits of flexible bus solutions together with the on time performances of rail systems. This new approach boosts to better meet environmental and economic challenges related to mobility.

Throughout Europe, the high quality, rapid transit concept was first applied to light rail before being extended to bus and trolley services. Then only, was the BRT concept adopted as a core transit solution to be entirely integrated into a transportation system. It allows optimized use of infrastructures, improved comfort and commercial speed and the development of added services for customer benefits.

#### **NEW DYNAMICS**

In France, most of the cities of more than 200,000 inhabitants already have or are about to launch one or several light rail services, now views BRT as innovative and viable alternative or complement. It is also seen as a very good compromise to the other middle size cities. Thanks to

#### A POSITIVE ENVIRONMENTAL IMPACT

High-capacity buses can carry more passengers, which further reduces per capita emissions of CO<sub>2</sub> and pollutants. Green fuels (CNG, hybrid solutions, etc.), electrical energy and eco-driving training also help improve the overall ecological footprint (including reduce noise nuisance).



high technologies combined with dedicated lanes, priority signals, optical bus guidance and optimized accessibility to vehicles, stations and platforms, BRT allows flexibility of choice and cost optimizing possibilities.

#### **EVERY CONVENIENCE AND COMFORT**

With its frequent service and capacity, BRT reduces waiting time while matching the pace of urban life. Vehicles are spacious, comfortable, and meet the full range of passenger access needs. Platform ticketing services, along with real-time passenger information at stops and on board, make everyday travel easier.

#### **ADDED VALUE FOR PUBLIC AUTHORITIES**

Investment costs for public authorities, like lead times, are lower than those of rail-based alternatives. Bus rapid transit is also a means of revitalizing a city center or reshaping the outlying urban environment. Factors such as design, equipment quality and landscaping solutions help enhance the image of the city and the areas on BRT routes.

Transdev expertise covers project engineering, transportation system supervision, urban integration and commercial management. Drawing on a wealth of experience acquired in Rouen, Nantes, Bogotá or Paris, the company is ready to share this knowledge with public authorities, looking to jointly develop customized BRT solutions able to adapt and stand the test of time.

## Good reasons to cho

#### INTEGRATED NETWORK

#### Connecting people

Transdev works to integrate BRT with other modes and services by creating a high-capacity corridor with strong interchanges and connected to secondary public transport routes.

We bring years of experience in mobility management and service design to enhance the entire transit system. Combined with its extensive real-time information knowhow, customer care programs and feedback management systems, Transdev helps connecting cities, regions and people with simplicity, speed and comfort.

#### ENHANCE THE EXPERIENCE

#### Comfortable and attractive

We work in close collaboration with manufacturers and even help local authorities to detail tender specifications for acquisitions to assure the most attractive high performance vehicles. Up lighting in soft shades, video information screens, guaranteed accessibility and the highest level of comfort are just some of the features that we constantly push forward. In Rouen, where BRT and light rail exist side by side, passenger surveys show equally positive passenger satisfaction and perception between the two modes.







#### **GLOBAL EXPERTS**

1 + 1 = 3

Using our knowledge management process and tool, expert.net, our global expertise and experience in the design, planning, integration and operation of bus rapid transit are in constant evolution. From Bogotá to Rouen, experts share progress, best practices, benchmarks and solutions to deliver direct benefits to our clients and passengers.

#### **URBAN REGENERATION**

#### Rediscover the city

Delivering a BRT concept is an opportunity for urban renewal aimed at regenerating a city center, revitalizing isolated districts and stimulating growth of new business areas. Transdev not only knows how to make the most of infrastructure, equipment and facilities to improve life for passengers and pedestrians, but also contributes toward a contemporary and innovative image for transportation and the city.

## ose Transdev

#### VALUE FOR MONEY

#### Optimize your resources

BRT requires less investment than many light rail solutions, with the benefit of shorter infrastructure delivery times. Our track record of on-time, on-budget deliveries speaks for itself. We include cost analysis and budget management in all phases of designing, building and operating a BRT. In addition, our variety of contractual experience ensures top-end delivery within the framework that suits you best, including our extensive knowledge of public-private partnerships.

#### SIMPLICITY

#### When information encourages mobility

At the stop, on board or at connecting transit hubs, our BRT systems and infrastructure ensure a stress-free and efficient trip. Real time information at the stop and on board, audio anoucements and dynamic visual data on connecting services help guarantee transfers. All this, combined with our integrated ticketing expertise, has helped BusWay® in Nantes drive a sector-wide 7% increase in passengers across the Southwest of the city, only after a first year of operations.







#### ENVIRONMENTAL LEADERSHIP

#### Green growth

Transdev possesses an unparalleled knowledge in environmental analysis and modeling. We see the broader picture of using efficient BRT to incite modal shift, meet ambitious environmental targets and bring the tools to help you achieve it. Use our carbon-calculator methodology to build a public awareness campaign, eco-driving tools to reduce emissions or access our vast experience in alternative fuels and environmental audits and risk management.

#### TECHNOLOGICAL DEPTH

#### Insight we share with clients

Across the company, we develop and apply solutions to ensure superior performance. For example, our BusLab® software and complementary interfaces allow you to receive and exploit real-time and collected data. Use map tracing, 3D graphics and performance graphs to analyze commercial speed, route times, punctuality and more. In Rouen, France, 68 vehicles are equipped with optical guidance systems to guide the vehicle into specially constructed station platforms, there ensuring accessibility.

### Transamo, 20 years by your side

A unique culture in assisting clients and managing complex public transit projects

The go-to partner for project managers and local authorities, Transamo, a subsidiary of Transdev, excels in providing support for transit projects from A to Z. Since its creation in 1994, Transamo has become the French benchmark reference for project management, not only supplying support services, but helping introduce key changes in mobility. From the reincarnation of light rail to the development of BRT, its teams of specialists have helped cities evolve, effect change and transform their environment.

#### **BRINGING PROJECTS TO LIFE**

Since transit projects vary considerably in type, context and objectives, Transamo set up a multidisciplinary team of experienced experts such as engineers, geographers, urban planners... Highly flexible, the group adapts quickly to client requirements and concerns.

Its General Studies team represents a wide scope of expertise and has the ability to carry out all the studies and investigations required to prepare for a public transport project and ensure its success.



#### FROM CONCEPT TO REALITY

The management of large-scale projects is a world unto itself. Transamo's specialists live in that world, are familiar with its culture and share its passion. Their impressive credentials include the BRT in Metz, light rail in Montpellier,

the tram-train in Mulhouse, the automated metro in Turin. Transamo was not only entrusted to assist the STIF (transit authority in Ile de France) in managing many T Zen projects, but also in conceiving the project description that defines the T Zen standard. In conducting its core business, project management, Transamo works closely with all parties involved to facilitate discussion, decision-making, according to the client's demand. For instance, it may be bringing support in safety management like for TransRegio in Germany. All together, Transamo provided expertise for

about 30 BRT projects and in the construction of close to 90 km of dedicated lanes.

#### TOMORROW IS TODAY'S AGENDA

Today, no approach to urban mobility can afford to concentrate on only one transit mode or route. Things have changed due to economic factors, environmental concern, the expansion of urban sprawl and the



lengthening of daily commutes. Today's planners must account for economic factors and existing installations as they apply a rationale based on optimization and take a clear, global approach to mobility issues. This is the way to solutions that are in line with client demand and budget needs. This is what being a partner from A to Z means.

In the wake of the Grenelle Environmental Forum, the French government committed to invest €2.5 billion to build infrastructure with mass transit dedicated lanes. Between 2007 and 2013, there were 3 waves of calls for projects to receive government funding; nearly 200 BRT projects were granted eligibility. Close to half of these are still in the development phase. More than 130 new BRT systems will come onstream between now and 2020.

50% of the BRT projects are for cities with less than 200,000 inhabitants. 80% of these projects required an investment of less than €70 million.

#### Our ambition:

To be the trusted partner of our clients and customers by pioneering in mobility.









TRANSIT AUTHORITY Nantes Métropole

#### OPERATOR

SEMITAN, a semi-public company

#### START OF CONTRACT

Renewed in 2010 for 7 years

#### **ACTIVITIES MANAGED**

Light rail Bus BRT BusWay® Chronobus River shuttle

#### **KEY FIGURES**

#### **NETWORK (2013)**

24 municipalities served 593,000 total residents 524 sq. km

#### Ridership

126.6 million passengers

#### Staff

1,793 employees, including 1,134 drivers

#### BUSWAY® LINE

Launched in November 6, 2006 1 line – 15 stations 7 km including 6.7 km of dedicated two-way lanes. 6 park-and-ride locations with a total of 1,280 parking spaces

#### Service

From 4:45 a.m to 0:45 a.m, extended to 2:45 a.m on Saturday nights Average frequency: every 3 minutes during peak periods, every 6-7 minutes at other times

#### Ridership

34,750 passengers per day

#### Total kilometers

944,000 km in 2013

#### BusWay® vehicles

22 Citaro NG articulated buses 120 passenger capacity per bus

#### Context

For nearly 30 years, the city of Nantes has been recognized as a leader in sustainable transportation and today it is a driving force in the rebirth of urban light rail. Greater Nantes' 2000-2010 urban transportation plan called for the planning and development of a BRT line that would be integrated into Nantes' existing public transportation system. Planners also had to show that BRT could compete with light rail in terms of efficiency and passenger appeal. Successful integration and operation of the new BusWay® line was one of the cornerstones of the plan, which aimed to reduce private car travel to under 50% of total trips.

#### **Objectives**

- > To expand Nantes' public transportation options by adding to existing multimodal services: buses and light rail.
- > To create a new high-frequency line serving the southern portion of the city, and that could serve as a catalyst for restructuring the entire system.
- > To offer a reliable, appealing and confidence-inspiring service at a moderate initial cost.

#### Transdev's answer

#### Technical expertise

Transamo, a Transdev subsidiary specialized in consulting and project management, joined the project during the preparatory phase. Transamo helps municipalities create and implement the technical, legal and administrative framework for BRT systems, and also assists in managing the calls for tenders for vehicle purchases.

#### Performance

BusWay® is the backbone of the TAN system. It provides the same level of service as light rail, offering:

- > dependable travel times, thanks to its dedicated lanes;
- > high frequency of service with extended operating hours:
- > full accessibility for disabled passengers;
- > AFNOR-certified customer service standards, including stations with information displays and ticket vending machines;
- > BusWay® is a registered trademark of the Transdev group.

#### A comfortable, appealing, environmentally-friendly service

> All of the Citaro buses in the fleet run on compressed natural gas (CNG), resulting in very low emissions and minimal noise pollution.

- > Automatic doors, access ramps, double-paned windows and natural lighting make the buses comfortable and pleasant to ride.
- > 1,280 parking spaces over four locations directly adjacent to the BusWay® lines reduce traffic congestion and pollution in the city.
- A video surveillance system that also covers park-and-ride locations guarantees passenger safety.

#### Real-time information

- > All stops have continuously updated real-time information screens showing current wait times; to accommodate the visually and hearing impaired, the system features audio information stations and buttons that activate auditory crosswalk signals.
- > On board the buses: audio and video information, current location on the line and transfer information
- > Interchanges display real-time information about current traffic and transfer conditions; connections are guaranteed, thanks to the drivers information system.



- > 92.5% customer satisfaction rate
- > From 2000 to 2008, the city of Nantes' automobile traffic decreased by 12% and public transportation ridership increased by 26%



TRANSIT AUTHORITY Bogotá District

#### OPERATOR

TransMilenio

#### CONTRACT START

**CONTRACT DURATION** until approximately

#### **KEY FIGURES**

#### SYSTEM

2018

115.5 km of dedicated lanes 136 stations 9 bus depots 11 routes Commercial speed of 24 km/h

#### **RIDERSHIP**

2.1 million passengers/day

#### **VEHICLES**

Approximately 1,600 articulated buses including 350 operated by Transdev

#### Context

In Bogotá, 80% of the population use public transportation to get around. 28,000 traditional buses used to crawl through the streets at a commercial speed of 8 km/h; and more than 3,000 traffic accidents involving buses caused the deaths of 800 people each year. In order to deal with this chaotic situation, the Bogotá authorities called in an operating consortium to set up a huge system to structure and rationalize public transportation.

#### Objectives

- > Set up a new public transportation system.
- > Free up the super-congested urban environment.
- > Increase use of public transportation.
- > Improve the system's performance and image.

#### Transdev's answer

Under the leadership of the district of Bogotá, Transdev, part of an operators' consortium, took part in the rejuvenation of the city. We brought our worldwide knowledge and expertise to help the Bogotá authorities run the BRT.

#### Construction of dedicated lanes

- > Construction at ground level of a central 4-lane corridor for exclusive use of articulated buses.
- > Creation of stations with an enclosed central platform, only accessible to pedestrians via walkways.
- > Automatic real-time information system alerting passengers to imminent arrivals and destinations served.

#### Redesign the urban space

- > Completion of 230 km of cycle paths.
- > Rehabilitation of 300,000 m<sup>2</sup> of pavement.
- > Planting of thousands of trees.
- > Restriction of private car use during rush hours.

#### A pioneering, ongoing increase of quality

Inaugurated in the year 2000, Transdev has played a major role throughout the development of this rapid transit system and again recently introduced new biarticulated vehicles to increase capacity.

Accessibility has also been improved, thanks to:

- > a clear hierarchy of station types: from individual stations located every 500 meters, to interconnected BRT stations providing transfers within the closed TransMilenio system;
- > transit centers at the outskirts of the city bring together feeder lines, BRT, metropolitan coach lines, pedestrians and cyclists, and ensure a smooth transfer while reducing congestion;
- > all stations have real-time electronic displays announcing the approximate arrival time of the next bus; though it is rarely necessary to check due to the short headway between vehicles;
- > station attendants help guide and inform passengers.

Transmilenio CDM (Clean Development Mechanism) is the first project of massive transportation in the world, with a methodology approved and registered since 2006 by the UN under the Kyoto protocol for greenhouse effect for gas reduction. The monitoring process performed by TRANSMILENIO S.A. aims to keep the gas emission reduction high standards in the operation of the massive transportation system in Bogotá.



- > Average travel time has fallen from 1 hour and 30 minutes to 35 minutes
- > 5% of trips in Bogotá today are by bicycle. BRT stations at each end of a line have extensive bicycle parking facilities to encourage cyclists to use the system. Currently there are 9 bicycle parking sites with 2187 parking places
- > Since the service launched at the end of 2012, close to 95,000 tons of pollutance have been avoided



#### TRANSIT AUTHORITY

La CREA (Communauté de l'Agglomération Rouen Elbeuf Austreberthe)

#### **OPERATOR**

TCAR subsidiary of Transdev

CONTRACT START

**CONTRACT DURATION** 30 years +1

#### **KEY FIGURES**

413,000 people served

#### SYSTEM

3 BRT lines 2 tram lines 23 fixed bus routes 33 school lines BRT: 78 km of routes, 50 stops

#### BRT RIDERSHIP in 2012

63,000 passengers/day 15.8 million trips

#### BUS + TRAM:

48.502 millions trips

#### KILOMETERS TRAVELED (bus & light rail)

13.9 million km/year

#### VEHICLES

222 buses 68 optically-guided articulated BRT buses 27 trams

#### STAFF (bus & light rail)

1,149 employees including 688 drivers 2 night service lines 2 taxi lines

#### Context

LA CREA (Transit Authority) decided to create three bus rapid transit routes to enhance the transit system and benefit residential and business communities across the city. The municipality set itself the goal of increasing the ridership and focusing on a light metro and a bus rapid transit system to reorganize urban space and move towards consistent levels of transportation provision on both sides of the Seine River.

#### **Objectives**

- > Ensure an integrated operation of the light metro and optically guided buses while improving the technology.
- > Monitor service quality on the public transportation lines to win over new clientele.
- > Anticipate the expectations of customers and noncustomers and conduct surveys on a regular basis.

#### Transdev's answer

#### A technical success that sets the standard

- > An optical guidance system ensures the accuracy and regularity of the curbside stop in the station for improved passenger access.
- > Renovation of intersections, with a traffic light priority system, increased the commercial speed by 15%.
- > Use of biofuels, leading to a 30% reduction in annual consumption of diesel fuel and a 15% reduction in greenhouse gas emissions.

#### Putting the passenger first

A fully integrated contactless card system for validation of all mobility services.

A powerful set of online and mobile web services, including:

- > personalized web space to manage a contactless transportation pass and loyalty scheme;
- > real-time schedule and disruption information;
- > a latest generation trip planner software.

Full-service commercial agency located in the center of town.

Roll-out of Transdev's proprietary customer feedback and request system, "Listen," to ensure fast and accurate answers.

#### A test-bed of innovation

Transdev is the only private operator participating in the "European Bus System of the Future" (EBSF) – a major project in developing breakthrough design of vehicles, infrastructure and operations. A pilot run on the Rouen BRT system focuses on accessibility, where buses have been specially equipped:

- > installation of a "horizontal" optical guidance system to complement the vertical guidance already used to ensure a smooth arrival at the curbside;
- > automated suspension units to adjust the level of the bus to the curb and deploy a seamless mini-ramp that ensures perfect access for wheelchair users and persons with reduced mobility.

**Result:** A close collaboration with manufacturers and stakeholders through the project and a major advance in accessibility set to become fully commercialized and rolled out elsewhere.



- > Passenger surveys show equally positive passenger satisfaction and perception between the LRT and BRT
- > BRT increased its ridership by 60% over 10 years
- > 95% satisfaction rate for online services



TRANSIT AUTHORITY for the Greater Paris Area Syndicat des Transports en Ile de France (STIF)

#### **OPERATOR**

Transdev Ile de France (location: Lieusaint)

#### **ACTIVITIES MANAGED**

- Urban transit system for Sénart
- Intercity routes
- T Zen-1 BRT Corbeil Essonne - Lieusaint/ Moissy

#### **KEY FIGURES (2013)**

#### THE T ZEN SYSTEM:

14.7 km of lines including 9.6 km dedicated lanes In 4 towns and 2 counties

#### RIDERSHIP

About 5,000 passengers/day

- 23 priority signals
- 14 stations including 2 dedicated lanes

#### DISTANCE TRAVELED

1 million km/year

#### VEHICLE FLEET

10 BRT EEV/EuroV compliant buses

#### STAFF

42 bus drivers and 6 inspectors

#### Context

For the 11 million people who live in the Greater Paris area,, the ability to travel freely from their home to work and leisure activities is crucial to quality of life. In recent years, the STIF has seen an impressive increase in demand for public transit and noted the sharp contrast between the ridership rate in Paris (densely populated and with good transit services) and suburban areas near the city (almost 40% of commuters use their car) and furthermore, remote suburbs (where 80% commute by car).

#### **Objectives**

Aiming to get people to change their traveling habits, the STIF came up with T Zen, an innovative BRT route that provides:

- > a transit solution that meets high standards of regularity, reliability and comfort;
- > a mode of transit minimizing environmental impact;
- > a way to optimize public resources.

#### Transdev's answer

Transdev, via Transamo, brought STIF expertise to project management support and BRT operations (e.g. advice on the selection of rolling stock, comanagement of work at the new maintenance center, system maintenance and reorganization of bus services).

In July 2011, the first T Zen line from the rail station in Corbeil Essonne to the one in Lieusaint /Moissy (total distance: 14.7 km) transformed the urban landscape (along a 9.6 km dedicated lane) and connected two very busy RER commuter rail stations.

#### Easy to use and comfortable

Thanks to a fleet of innovative, comfortable vehicles with their distinctive branding, passengers can easily recognize T Zen, which is becoming the backbone of the local transit system. In addition to the usual equipment, T Zen features innovative amenities. The buses are fully-air conditioned, with wide sliding doors and an interior design that creates strong identity. Among other things, the T Zen system offers:

- > real-time information displays on board vehicles and at each bus station:
- > full accessibility at stations, vehicles for persons with

special needs, the means of delivering information to disabled customers including visually and hearing impaired:

- > full air-conditioning;
- > automatic sliding doors that open laterally;
- > video surveillance system.

#### Urban renewal

A pioneer in its field, T Zen is an efficient people mover. It can handle up to 2,400 passengers an hour, nearly 35% more than conventional buses. All along its route, it has priority at traffic stoplights. As a result, it can run at up to 70 km/h, which helps ensure high service frequency and a full roster of departure times. Its high service capability appeals to businesses and families on its path. Work has been done to create space in nearby avenues and provide new pedestrian

#### Minimized environmental impact

The buses are equipped with Euro 5- and EEVcompliant engines and serviced at a "green" technical center with solar panels on the roof, natural gas heating and a water recycling system.



- > 82.2% of respondents to a customer satisfaction survey said that T Zen saves them time (18.3 minutes on average)
- > In the customer satisfaction survey (OP Marketing 2013), the average score given to the vehicle concept was 8.6/10



#### TRANSIT AUTHORITY

Communauté d'Agglomération Chalon Val de Bourgogne

#### **OPERATOR**

Société des Transports de l'Agglomération Chalonnaise (STAC)

CONTRACT START

**CONTRACT DURATION** 6 years

#### **KEY FIGURES (2013)**

#### 110,000 inhabitants served

#### SYSTEM

1 BRT line 6 urban bus routes 12 suburban bus routes 1 shuttle serving downtown 1 paratransit service On-demand transportation

#### STAFF

112 employees incl. 84 drivers

#### **BRT FLASH LINE**

6 km of line (incl. 1/3 on dedicated lanes) 15 stops 6 vehicles

#### **BRT RIDERSHIP**

5,500 passengers/day Total ridership in 2013: 7.2 million trips

#### DISTANCE COVERED

BRT: 318,554 km System total: 3,330,000 km

#### Context

The greater Chalon area decided to modernize its public transit system with transportation services that would give customers a real alternative to private cars. The master plan for transit routes was revamped in September 2012 and structured around a new BRT service.

#### Transdev's answer

#### Credible transit services

- > A bus system including a BRT line (service every 10 minutes in peak hour and every 15 minutes in off-peak periods) with expanded service hours (5:50 a.m. to 9:15 p.m.).
- > Sunday services (8 a.m. to 9:15 p.m.).
- > Increased intermodality: +40% more service to the rail station on the Dijon-Lyon line.
- > Development of dedicated lanes and intersections with traffic signal priority systems.
- > Fully accessible stops.
- > The service design included an urban renewal project for an area with 7,500 inhabitants.

#### Visibility for transit services

- > A transit service with its own image, distinctive branding of vehicles and customer amenities.
- > Easy access to real-time information by Visiotrans, Transdev's proprietary passenger information system, available on digital screens, mobile apps and much more.

#### **Objectives**

- > Diversify system use by targeting new passenger segments and change the image of a system used mainly for school bus services.
- > Integrate the BRT service design with the overall transit-oriented development plans for the greater Châlon area.
- > Promote new transit services through a targeted sales policy.

> The rollout of "Listen," Transdev's proprietary program for managing customer feedback (e.g. requests for information, complaints or questions about the lost & found).

#### A proactive sales/marketing policy

Transdev has implemented a dynamic sales/marketing policy to boost awareness of the services and their advantages.

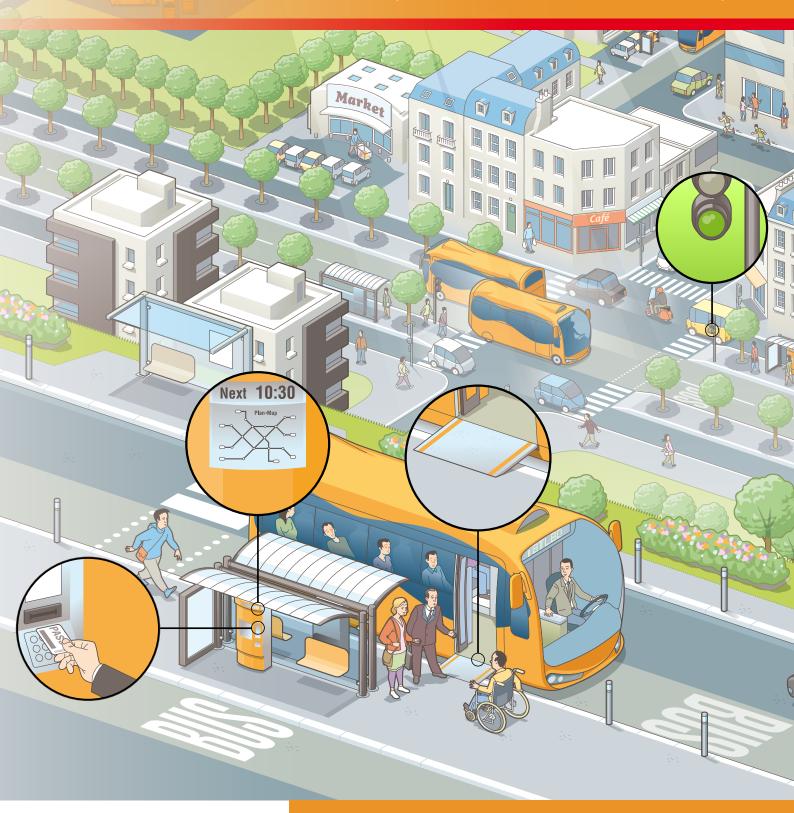
- > A targeted marketing campaign aimed to attract occasional and regular users on two main routes, including the "Flash" BRT line, resulting in 2,000 new users and 150 new subscribers.
- > To attract commuters, Transdev has undertaken an ambitious policy for deployment of employee transportation programs. STAC has therefore signed an agrement with 6 local companies and the Transit Authority.
- Introducing an integrated smart ticketing system will eventually allow users to recharge their smartcards online.



- > +30% BRT ridership in 18 months
- > 93% of customers are satisfied with the BRT, 91% with the entire system
- > Average speed: +25 % (17 km/hr vs. 13.5 for the same line prior to improvement)

# CODE NAME BRT

A concept that draws attention in the urban landscape



**Efficient** > BRT operates primarily on its own site.

**Confortable**> BRT is designed for the comfort of its passengers.

#### **Ecological**

> Providing transportation to a large number of passengers, BRT contributes

