International Awards 2011

The winners of the first International PTx2 Awards were announced at the UITP World Congress & Exhibition on 14 April in Dubai.

Daring Ambitions Award
• Abu Dhabi Department of Transport, United Arab Emirates
  Abu Dhabi Public Transport Program Initiative

Finance Innovation Award
• Compañía Uruguaya de Transportes Colectivos, Uruguay
  Trust Fund of Urban Transport of Montevideo II

Knowledge & Research Award
• Centre of Excellence in Urban Transport, CEPT University, India
  Network planning for BRTS Ahmedabad

Political Commitment Award
• Lagos Metropolitan Area Transport Authority, Nigeria
  Significant increase in investment in public transportation in Lagos State

Public Transport Advocacy Award
• Canadian Urban Transit Association, Canada
  Transit Vision 2040 – A Blueprint for Public Transport in Canadian Communities

Service Improvement Award
• Azienda Trasporti Bergamo, Italy
  ATB Mobility to the third power

Technology & Innovation Award
• Vix Technology, France, and Cityway, France
  SISMO: e-ticketing, fleet tracking, multimodal info system and new services

Special Award
• Svensk Kollektivtrafik, Sweden
  The Swedish Doubling Project aims to double the market share and travel volume of public transport

• Land Transport Authority, Singapore
  Key initiatives of Singapore’s Land Transport Masterplan (LTMP)
UNITED ARAB EMIRATES (UAE)

Abu Dhabi Public Transport Programme Initiative

Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.

Project/initiative: Abu Dhabi Public Transport Programme Initiative
Organisation: Department of Transport www.dot.abudhabi.ae
Partners in the project/initiative:
- Abu Dhabi’s Department of Transport
- Abu Dhabi Government
- Urban Planning Council
- Abu Dhabi residents and visitors

Launch date: 2009
End date: 2030

Objectives

The main objective of the Abu Dhabi Public Transport Programme Initiative is to trigger a massive shift to public transport in Abu Dhabi City. Public transport mode share in Abu Dhabi City was less than 1% in 2007, and increased to 4.2% by mid 2010, and is targeted to reach 33% by 2030. Currently public transport is serving mostly the captive market. DOT’s objective is to give public transport the role of being the mode of choice, regardless of wealth or the purpose of the journey in addition to serving the captive market.
The Abu Dhabi Public Transport Programme Initiative includes a number of major projects and studies, such as the Metro, LRT/Tram, Water Transport, Regional Rail Study and others, as well as a number of on-going studies such as: Policy and Regulation Study; Road Pricing Study; Bus Lane Study and others. Implementation of such projects and studies would contribute to the PTx2 strategic goals and the DOT ambition to grow the public transport market share. It is worth noting that the above projects and studies place customer needs and lifestyle at the core of planning, funding and delivering high-quality mobility services. In addition, DOT is committed to integrated urban policies to optimise the benefits of the public transport system in Abu Dhabi. Integration is being conducted through the Integrated Planning Department at the DOT. The programme’s aims are wider than a core public transport network, embracing comprehensive mobility improvement initiatives for pedestrians, cycling, etc.

**Contribution to the PTx2 strategic goals**

The Abu Dhabi Public Transport Programme Initiative includes a number of costly projects such as the metro, LRT/Tram and commercial activities. The Abu Dhabi Department of Transport is committed to a financing approach that is both affordable and sustainable. To be sustainable, revenues from all transport sources (fares, congestion charges, etc.) should at least cover public transport operating and maintenance costs, preferably including an allowance for capital replacement costs. In the longer term, means of raising revenue from users of the highway system are being seriously considered. Secure stable funding and investment will be sought by applying a comprehensive business case-driven approach to expenditure and investment while exploring options for innovative value for money mechanisms. Application of extensive competitive procurement will pursue value for money in service delivery and whole asset life.

**Financing scheme of the project / initiative**

Abu Dhabi’s economic, social, cultural and environmental vision anticipates a City population by 2025 exceeding 2.2 million with mobility demand expected to triple to 6.6 million daily passenger trips. The current transport system – which before 2009 focused primarily on the automobile with some taxis and a few local and employee specific buses – will be insufficient to meet Abu Dhabi’s future needs. Without any significant investment in alternative transport options, road congestion will become progressively more severe and the road network will be at full capacity before the year 2015 in certain areas of the city.

In 2006 the Government of Abu Dhabi established the Department of Transport (DOT) with a mandate to ensure that all aspects of transport policy, development and delivery
were integrated with land-use planning and fully coordinated with relevant local, regional, and international stakeholders and partners.

In 2008 the DOT started an unparalleled public transport development programme. A small number of ‘path finding’ free bus routes started in the latter part of 2008, followed by an expansion to a significant network of routes with a modest fare from the start of 2009. The significant initiative resulted in an increase in the public transit mode share from less than 1% in 2007 to 4.2% in mid 2010 and an increase in the number of buses from 240 buses to 750 buses during a relatively short period. The number of buses is expected to reach 1,300 in the course of 2011.

In 2009, the DOT created the ambitious Surface Transport Master Plan (STMP). The STMP was commissioned to deliver a World Class Transport System for Abu Dhabi and address the regional transport needs of the Emirate as a whole with particular emphasis on the Abu Dhabi Metropolitan area with a strong emphasis on environmental and cultural protection. The plan incorporates the concept of sustainable development. The STMP sets out to increase the modal share of public transport to 33% during peak hours by the year 2030. The ambitious public transport plans for Abu Dhabi established through the STMP include: metro (130 km), LRT/Tram (340km), high-speed regional rail, an improved bus system, ferry and water taxi, demand measures, together with major improvements in streetscape, pedestrian and cycling provision.

In 2010 momentum has accelerated and the DOT started the feasibility studies for the Metro, LRT/Tram, Water Transport, Regional Rail Study as well as the Abu Dhabi Bus Transport Master Plan Study. Work has just begun on a Policy and Regulation Study; a Fare Structure Policy Study; a Mobility Management Study; a Road Pricing Study, and a Pedestrian Master Plan. Also, the DOT recently finalised the Shared taxi and Minibus Study; the Demand Responsive Transport Study; a School travel Planning Study; and a Bus Lane Study.

All the above initiatives would contribute to delivering a world-class public transport system that will support the vision of Abu Dhabi as a world-class green city.
URUGUAY

Montevideo Urban Transport Trust Fund II

Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.

Project/initiative: Montevideo Urban Transport Trust Fund II
Organisation: Compañía Uruguaya de Transportes Colectivos S.A.
www.cutcsa.com.uy

Partners in the project/initiative:
♦ Municipality of Montevideo
♦ EF Asset Management
♦ Discount Bank
♦ CPA/Ferrere
♦ The rest of Montevideo’s transport companies

Launch date: 13/10/2010
End date: 31/12/2018

Objectives

Securing stable funding and investment schemes. The securitisation of the future revenue makes it possible to negotiate lower rates, and as the payments are a percentage of revenue, the repayment period is the variable.
**Contribution to the PTx2 strategic goals**

It is particularly important that our transit systems maintain their infrastructure to a standard where they can provide riders with a service that is both reliable and comfortable. Financing fleet renewal in a cheaper way and under a stable scheme will attract customers by providing them a transport service using new vehicles.

**Financing scheme of the project / initiative**

The cost of the assessments, consultancy services and releasing is less than the difference between the cost of the traditional sources of funding and the trust fund negotiated rate.

**Description**

Ferrere Lawyers advised the Municipality of Montevideo and transportation companies in the first trust to issue certificates of participation in Indexed Units, a unit of account in Uruguayan pesos adjusted according to domestic inflation.

The Trust Financial Fund for the Montevideo Urban Public Transport made an issue for a total of 400,000,000 Indexed Units, equivalent to USD 46 million.

The deal involved the securitisation of mandatory contributions from transportation companies to a fund administered by the Municipality, equal to 3% of the total monthly revenue from ticket sales. This flow is in turn secured by a charge on the Municipal subsidies paid to transport companies for tickets for students and retirees, representing 10% of their monthly revenues.

The scheme is simple: the transport operators created the Trust Fund and they contribute with 3% of their incomes from ticket sales. The fund issues debt certificates with a 5.8% lineal interest annual rate in US dollars. The repayment period is estimated but linked to the performance of the ticket sale revenue. The municipality warranties the payments with the subsidies generated each month.

Traditionally, transport companies had financed major investments (like vehicle acquisitions) with loans from banks in foreign currency (US dollars). The economic and financial crises in Latin American countries and the resulting currency devaluations represented high risks and often great financial problems for the transport companies. It was hard and too expensive to negotiate with the banks when the payments became so onerous.

This new financial strategy assures that the proportion of the budget dedicated to major investments will not increase in times of crisis; it will simply take longer to repay. This financial strategy represents a stable funding and investment scheme.
Fideicomiso Financiero Fondo de Financiamiento del Transporte Urbano de Montevideo II
INDIA

Project Network planning for BRTS Ahmedabad Corridor

Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.

<table>
<thead>
<tr>
<th>Project/initiative:</th>
<th>Project Network planning for BRTS Ahmedabad Corridor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation:</td>
<td>Centre of Excellence in Urban Transport, CEPT University* <a href="http://www.cept.ac.in">www.cept.ac.in</a></td>
</tr>
<tr>
<td>Partners in the project/initiative:</td>
<td>♦ Ahmedabad Municipal Corporation</td>
</tr>
<tr>
<td>Ahmedabad Municipal Corporation is the implementing agency for the project. It was a key partner in planning, approving and implementing corridors for BRTS.</td>
<td></td>
</tr>
</tbody>
</table>

| Launch date: | 14/10/2010 |
| End date:    | 1/12/2012 |

Objectives

- To demonstrate a new approach to selecting public transit corridors. The proposal demonstrates that transit corridors should be selected by looking at potential future development and linking logical origins and destinations.
- To create new corridors for BRTS through implementation of the City Master Plan. The network takes into account capacity augmentation through carriageway widening, new river and rail overbridges and Master Plan proposals.
- To integrate BRTS system with existing public/ para-transit service. The network selection takes into account existing AMTS route and para-transit routes.
The BRTS network connects the busiest places in Ahmedabad. Parts of the corridor were implemented by the AMC as part of a Master Plan in 2009. Important landmarks like the University, Kankaria Lake and railway station are now connected to residential neighbourhoods. The BRTS provides a mobility option for women and senior citizens. Social trips have increased from 12% to 20% in one year. As the system expands from 38km to the planned 90km, abandoned mill lands in the heart of the city have seen major redevelopment projects. These include a cancer hospital, housing for the EWS, commercial complexes and business parks. Auto rickshaws, which earlier were used for longer trips, have adapted to become a feeder service. 21% of existing users shifted from two-wheelers. With an average trip length of 6 km, this translates into vehicle-km savings of 100,000 km/day. This has a direct impact on congestion and pollution reduction. Today, 25% of people using the BRTS walk to access the system.

CEPT University is identified as one of the four Centres for Excellence (CoE) in Urban Transport in India by the Government of India. As a CoE, CEPT receives a one-time grant from the Central Government under which it is involved in the following activities:

- Technical advisory;
- Human resource development;
- Knowledge management and advocacy.

The BRTS project in Ahmedabad has been financed through a Central Government programme called Jawaharlal Nehru National Urban Renewal Mission (JnNURM). Under the programme, the Ahmedabad Municipal Corporation contributes 50%, the Central Government contributes 35%, and the State Government contributes 15%. CEPT is the principal consultant to AMC for the project. Some components of the BRTS (rolling stock, fare collection and vehicle tracking) have been executed based on a PPP model.

The network for Ahmedabad BRT was selected in two phases. In phase 1, the corridors selected were mainly the rings in Ahmedabad. During phase 1, while existing and potential demand were prime considerations for selection of the corridor, as the concept was being implemented for the first time, often the availability of RoW and ease of implementation took precedence over demand. More difficult corridors for implementation, but having higher demand, were included in subsequent phases. The overall size limitation of the project was also a factor in leaving out some of the critical links from phase 1. This proposal is to develop BRT on these critical links so that optimal utilisation of the system is achieved. The aim is to consolidate on the gains achieved.
Since sanctioning phase 1 of the project, AMC implemented Development Plan proposals for wider roads in the inner city. Major access roads were widened to 30 metres. Similarly, AMC removed encroachments from road alignments in the intermediary zones. These opened up several opportunities for BRT to connect important destinations.

While travel demand, potential to improve access, needs of the urban poor and the contribution to area development are the guiding principles for identifying the corridors, the following were the critical conditions for selecting particular roads for BRT.

**Following Pareto Optimality, it is preferred that when a road is adopted as a BRT corridor, all existing users, immediately after completion of the project, receive the same or a better level of services, while the bus users receive very high quality services.**

This has been achieved through selection of wider roads (first phase) or through creation of additional capacity through widening of roads, adding a link to complete the road, adding an ROB/underpass to cross over a rail line or building an elevated road, and using all or part of the additional capacity for BRT.

For phase 2, the network was completed by identifying the radial roads that would complete the network. These radial roads would provide north-south and east-west connectivity in addition to the ring roads of phase 1. While selecting roads along a potential BRT corridor, the policy has been to **connect busy places but avoid busy roads**. In the entire process of network selection, the emphasis was on creating a logical network that provides city-wide mobility. A further draft operational plan was prepared, based on a model developed on EMME-II using detailed information collected through AMTS bus frequency and occupancy survey, an onboard origin destination survey, transfer surveys and IPTS frequency occupancy survey. This enabled rationalisation of the proposal.
**NIGERIA**

**Significant increase in investment in public transportation in Lagos State**

*Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.*

**Project/initiative:** Significant increase in investment in public transportation in Lagos State by Babatunde Raji Fashola (SAN), Governor of Lagos State, Nigeria

**Organisation:** Lagos Metropolitan Area Transport Authority  
www.lamata-ng.com

**Partners in the project/initiative:**
- Federal Government of Nigeria
- Ecobank Plc
- Skye Bank of Nigeria Plc
- World Bank
- National Union of Road Transport Workers (NURTW)
- Road Transport Employers Association of Nigeria (RTEAN)
- Eko Rail Limited
- 1st BRT Cooperative Limited
- ICBC/MSSL Bus Company Limited
- Mutual Benefit Assurance Plc
- French Development Agency
- Marina Express Limited

**Launch date:** 01/2009  
**End date:** 2020

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**Objectives**

The objectives of the unprecedented increase in investment in public transport are as follows:
- Poverty alleviation (40% reduction in transport costs);
- Economic development, with rail & BRT projects contributing 2% each to State
Increased investments are facilitating the implementation and operation of a higher quality and efficient public transport system and services, leading to reduced transport operation costs and hence a reduction in fares. The BRT scheme has led to a reduction in the average transport costs (-50% for commuters) as a share of disposable income. It has meant that operators and commuters enjoy congestion-free travel, reduced travel time (-40%) and more time to pursue other life-enhancing activities (e.g. leisure). Private-sector participation (PSP) is attracting new funds and effective management practices to the sector. PSP is also bringing in innovation, typified by the advent of Park & Ride schemes, e-ticketing to facilitate integration of modes, and the creation of new jobs in the economy. Modal shift to current schemes stands at around 70%, eliminating poor-quality minibuses- a major contributor to air pollution.

**Financing scheme of the project / initiative**

The sources of funds for financing the implementation of the governor’s public transport policy are as follows:

- State budgetary provisions;
- Contributions from Local Governments;
- State Transport Fund – 50% of revenue from levies and fees raised in the transport sector – e.g. licensing and registration of vehicles, fees for issuance of hackney permits, etc.;
- Concessionary loans from multilateral agencies – e.g. World Bank, French Development Agency (AFD);
- Bond issuance programme – for specific projects;
- Private sector finance within a framework of PPP initiatives e.g. Build, Operate & Transfer (BOT), Design Build Finance Operate (DBFO), etc.

**Description**

Investments in public transport infrastructure, services and regulation in Lagos State (Nigeria) from both public and private sector sources have significantly increased since 2009 and more so in 2010, when the Governor of the state Mr Babatunde Raji Fashola adopted the policy of transforming public transportation in the state from control by informal operators to a regulated system, benchmarked against public transport services in major cities and towns in the developing and developed worlds. The ultimate aim is to significantly increase the public transport modal share and improve the quality of life of Lagosians from the economic and environmental perspective.
Uniquely in Sub-Saharan Africa, the governor’s policy has facilitated the strengthening of the Lagos Metropolitan Area Transport Authority (LAMATA), the institution responsible for implementing the above policy. Professional capacity in the institution and the sector (e.g. operators) has been significantly enhanced over the last 12-18 months through local and international training and recruitment of experienced professional staff. Expenditure in this area alone grew by almost 130%, from USD 210,000 to USD 480,000.

The Transport Master Plan for Lagos prepared in 2005 sets out the vision for integrated and sustainable transport in Lagos over a 15-year timeframe to 2020. The governor’s policy embraces this plan and this is evident in his championing the appropriation of public funds and the attraction of private finance for the timely implementation of several (public transport) aspects of the plan. For example, in June 2010, construction works on the USD 1bn 27km Blue metro rail line in Lagos began. It will carry about 400,000 pax/day, reduce vehicular trips by up to 30% and reduce GHG emissions by 20%. As of today, over USD 100m in public funds has been spent on the project.

In addition, a private-sector consortium of local and international companies successfully bid for the concession to operate and maintain the rail line. The consortium, which includes CAF (Spain) and GE (USA) is investing USD 600m in the project. Mr. Fashola’s commitment is underscored by his presiding over a weekly review meeting to assess and monitor the progress of the rail project. This he supports by regular personal inspection of the construction progress of the project.

The Bus Rapid Transit (BRT) network in Lagos is also being expanded. Design of a 50km extension of the acclaimed BRT ‘lite’ scheme in Lagos was completed in November 2010. Funding from the World Bank and the French Development Agency (totalling USD 220m) has been secured for implementation during 2011/12, while several consortia have expressed interest in operating the scheme. The approach to implementation of the transport plan, being championed by the governor, embraces participation in the formal regulated public transport system by erstwhile informal operators. The governor personally leads consultation efforts with operators, participating in developing appropriate strategies for incorporating current operators in new schemes, backed up with international study tours to achieve seamless transition and integration. For example, the consortium operating the successful Bus Franchise Scheme in the West of Lagos includes a cooperative comprising former drivers of ‘danfo’ mini buses.

Governor Babatunde Raji Fashola has significantly increased public sector investment in public transport by over 50% in 2010 at USD 196.2m, compared with a budgeted average of USD 130.5m over the immediate past two-year period of 2008 and 2009 in the State budget. Additionally, through his public transport funding policy that emphasises and provides the enabling environment for PPP initiatives, he has attracted about USD 118m from bus and water transportation private sector operators, additional to the USD 600m for private rail investment and USD 220m credit funding from multilateral institutions.

Also, in response to the increased capital requirements in the sector, the governor is adopting innovative financing methods to finance and fund public transport projects.
Having received a favourable rating from the international rating agency Standard and Poors, the state is raising capital via the local and international capital markets through successful sub-sovereign bond issuance programmes and other instruments.

The Governor of Lagos State, Mr. Babatunde Raji Fashola (SAN) arrowed during one of the inspection visits to the Blue line rail Project site.
CANADA

Transit Vision 2040

Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.

Project/initiative: Transit Vision 2040
A Blueprint for Public Transport in Canadian Communities

Organisation: Canadian Urban Transit Association [www.cutactu.ca]

Partners in the project/initiative:
- Federation of Canadian Municipalities
- Canadian Institute of Planners
- Transportation Association of Canada
- Canadian Home Builders Association

Launch date: 07/06/2009
End date: 01/01/2040

Objectives

Transit Vision 2040 is a comprehensive plan with an overriding objective to increase per-capita transit ridership (patronage) between 2010 and 2040. Growth targets vary between 50% and double, depending on city size. While these targets are less ambitious than the overall UITP aim of doubling the public transport market share worldwide, they were designed to be realistic in the Canadian context. Additional objectives relate to sub-themes of the Vision, addressing improvements to service quality, customer focus, energy efficiency, financial health and strengthening knowledge and practice.
Transit Vision 2040 defines a future in which public transit maximises its contribution to quality of life with benefits that support a vibrant and equitable society, a complete and compact community form, a dynamic and efficient economy, and a healthy natural environment. It consists of a framework of 6 themes and 27 strategic directions, all of which are integrated to work towards the overriding per-capita transit ridership goal. A series of 67 indicators has been established to measure and report on annual progress towards individual and overriding targets. While organised in a somewhat different fashion, the Transit Vision 2040 strategic directions are well aligned with PTx2 strategic goals and action areas.

The creation of Transit Vision 2040 was funded entirely from within CUTA's association budget. Implementation is a multi-year initiative that will draw on support from all stakeholders, including all levels of government, transit systems, private sector businesses, associations and CUTA itself. The roles of these stakeholders have been clearly defined in a matrix of responsibilities. In those areas where CUTA is identified as a lead actor, national committees have been assigned with specific linkages and have developed business plan strategies designed to meet the stated targets.

How are Canadian cities and communities evolving into the next generation, and what are their needs for access and mobility likely to be? To answer this question, the Canadian Urban Transit Association (CUTA) undertook a broad set of consultations to bring together the best minds and prepare for ways to respond to national challenges including economic prosperity, climate change, public health, safety and security. This important new initiative sets a course for public transit to maximise its contribution to the quality of life in Canadian communities over the next three decades.

Transit Vision 2040 is based on an understanding of human access and mobility, an examination of the changes that communities are likely to experience, and an assessment of public transit’s potential to mitigate or reinforce changes and make them more liveable, economically robust and environmentally healthy. It integrates considerable input from a wide range of individuals and organisations, an online survey completed by hundreds of respondents, and discussions with urban transportation experts, planners, municipal elected leaders and land developers. Former federal ministers, former provincial premiers, bankers, economists, environmental champions, journalists and academics reviewed the vision and assisted in its development.

Transit Vision 2040 defines a future in which public transit maximises its contribution to quality of life with benefits that support a vibrant and equitable society, a complete and compact community form, a dynamic and efficient economy, and a healthy natural environment.
The Vision involves:

1. **Putting transit at the centre of communities** through stronger government policy and decision-making frameworks, and better community planning and design.

2. **Revolutionising service** in all types of communities through expansion and innovation, so that transit systems can both encourage and serve growing demands as they keep pace with the changing face of cities and towns.

3. **Focusing on customers** and accelerating the delivery of flexible, integrated transit services that meet the needs of an increasingly diverse and discriminating clientele.

4. **Greening transit** to further reduce the industry’s ecological footprint, improve energy efficiency and limit greenhouse gas emissions.

5. **Ensuring financial health** through enhanced transit infrastructure and operating investments by all orders of government, more progressive approaches to generating revenue, and new efficiencies in service delivery.

6. **Strengthening knowledge and practice** so that Canada’s transit industry can respond effectively to future opportunities and challenges.

Short-term actions toward this vision focus on immediate opportunities and start work toward critical, longer-term goals. A key priority is the creation of a monitoring and reporting plan that outlines a framework for measuring progress toward key indicators. Achievement of Transit Vision 2040 will require the full commitment of Canada's federal, provincial, territorial, regional and municipal governments in partnership with transit systems and the private sector. Together, these organisations will provide the leadership, knowledge, resources, innovation, determination and spirit of partnership that can make Transit Vision 2040 a reality, for the benefit of all Canadians.
## ITALY

**ATB= Mobilità³ (Mobility to the third power)**

*Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.*

<table>
<thead>
<tr>
<th><strong>Project/initiative:</strong></th>
<th>ATB= Mobilità³ (Mobility to the third power), the integrated development plan for mobility in Bergamo. The project aims to attract new customers and change mobility habits, thereby reshaping the town.</th>
</tr>
</thead>
</table>
| **Organisation:**        | Azienda Trasporti Bergamo  
www.atb.bergamo.it |
| **Partners in the project/initiative:** |  
♦ ATB Mobility SpA  
♦ TEB  
♦ SAB  
♦ Regione Lombardia  
♦ Transport Ministry |

ATB Mobility SpA manages public transport and integrated mobility systems in the Urban Area of Bergamo. In 2009, the ATB Group was involved in the implementation stage of the T1 Bergamo-Albino tramway, via its subsidiary TEB. It also introduced an integrated system between urban and suburban areas, in cooperation with SAB, the local suburban operator. TEB is affiliated to ATB (on behalf of the Municipality of Bergamo), the Province of Bergamo and the Chamber of Commerce. Among the sponsors there are also the Regione Lombardia and the Transport Ministry.

| **Launch date:** | 24/04/2009 |
| **End date:**   | 31/12/2020 |

**Objectives**

Line T1 is the first part of a tramway system including: the Valle Brembana T2 (Bergamo-Villa d’Alm) and city T3 (from Via Corridoni to the Papa Giovanni XXIII New
Projects Showcase

Hospital); the rail and tramway link between the city and Orio al Serio Airport; and the tram-train system on the local railway network. The main objective is to improve mobility thanks to public transport, to ease traffic flow in highly congested areas and allow citizens to move around in a comfortable, safe and convenient way. Also, the network aims to promote the link between the chief town and its sprawl.

**Contribution to the PTx2 strategic goals**

The project aims to increase the public transport market share thanks to an improved mobility offer and a high-quality service including integrated mobility management (public transport, private vehicles, bike sharing, walking) and complementary facilities (parking area, ticket machines). Parking policies and local mobility policies are two other strategic aspects of the programme. The project will have a positive impact on quality of life because it will reduce travel time and cost, improve the quality of the environment by alleviating the impact of fossil fuels, and enhance the existing public transport network. Furthermore, it will increase the real estate value of the area. The results of a study carried out from September 2009 to May 2010 show that the tram has contributed to reducing private traffic by more than 2,681,000 km/year, and to cutting fine particle emissions by 1.54 tonnes. The tram has also attracted new passengers (12.5% of the total) who previously used cars or motorbikes (from an interviewed sample of 488 people).

**Financing scheme of the project / initiative**

The cost for line T1 amounts to EUR 142 million, while the estimate for line T2 is EUR 143 million and for line T3 EUR 157 million.

The expenses include works, installation, rolling stock, dispossession, project, construction management and tests. 50% of line T1 was sponsored by the Transport Ministry, 21% by the Regione Lombardia, 9% by the Province of Bergamo, 9% by ATB SpA, 2% by the Chamber of Commerce and 8% by TEB SpA. The allocation for lines T2 and T3 will be: 60% Transport Ministry, 20% Regione Lombardia, 9% Province, 9% ATB SpA and 2% Chamber of Commerce. Complementary facilities of line T1 (parking lots, bike sharing stations and cycle lane) were sponsored by the Province, the municipalities, TEB and ATB (on behalf of the Municipality of Bergamo).

**Description**

The ATB Group is committed to the mobility of Bergamo and the surrounding Urban Area (more than 350,000 inhabitants). ATB activities include public transport (buses, funiculars and trams) as well as integrated mobility systems such as info mobility, restricted traffic areas, parking, educational programmes (Piedibus), and
research/mobility plans. This strategic approach to the matter helped to develop instruments and policies in partnership with the Municipality. This led to Bergamo being recognised by Asstra and ISFORT as “the best middle sized town in Italy for mobility”\(^1\) in 2010.

In 2009, the ATB Group was a protagonist in the implementation stage of the \textbf{T1 Bergamo-Albino} tramway, via its subsidiary TEB. ATB also introduced an integrated tram/bus timetable and fare system with the High Seriana Valley and the Province of Bergamo (managed by the operator SAB) and the Urban Area, to which line T1 belongs. This made it possible to offer passengers a single travel pass and a high quality transport service. The tramway T1, based on the reuse of the railway surface of the former ‘Ferrovia delle Valli’, links the chief town to the densely populated towns in the hinterland and in the mid valley, enhancing these areas and easing the traffic and the ‘bottle-neck effect’ on the main roads. Facilities such as park-and-ride and ticket vending machines at boarding stations allow integration with private vehicles. There are bike-sharing docking stations near to the main stations of the T1 line. In the next few years, their numbers will be increased thanks to the Tram&Bike project. Moreover a new cycle lane will be built along the T1 tramway. The mixed ‘Tram&Bike’ offer will provide a sustainable solution to get quickly to the chief town by tram and use the bicycle for the ‘last mile’.

Safety and security on board and at the stations are guaranteed by state-of-the-art devices.

The communication campaign to launch the tram, which focussed on innovation, quality and ecology, received a positive response from young people. The ‘Open tram by night’ event extended the service up to 11 p.m. with performances, graffiti artists and refreshments at the stations.

In April 2010 the line T1 celebrated two million passengers, with clear benefits for air quality and the environment: 10,000 passengers per day, a reduction of 2,861,000 km/year in private traffic, a 1.54 tonne annual reduction in fine particle emissions\(^2\). The tram has attracted new passengers (12.5% of the total) who previously used cars or motorbikes (from an interviewed sample of 488 people).

In 2010 TEB carried out two customer satisfaction surveys with good results for perceived quality (71/100)\(^3\).

Other developments in the tramway system are in the pipeline:
- the Valle Brembana T2 (Bergamo-Villa d’Almè) due to reduce the heavy traffic from the towns of the Brembana Valley into Bergamo;
- the city T3 from Via Corridoni to the ‘Papa Giovanni XXIII’ New Hospital;
- the rail and tramway link between the city and Orio al Serio Airport;
- and the ‘tram-train’ system on the local railway network.

\(^1\) “Casi di politiche urbane di successo. Percorsi possibili per una mobilità sostenibile nelle città medie” indagine 2010, elaborata da ASSTRA Associazione Trasporti e ISFORT.
\(^2\) Research made by TEB in partnership with ACI Automobile Club Italiano (Italian Club for car drivers)
\(^3\) Customer satisfaction survey made in November 2010 by DataContac Srl for TEB.
FRANCE

SISMO: Integrated Service for Mobility in the French county of Oise

Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.

Project/initiative: SISMO: Integrated Service for Mobility in the French county of Oise. A project facilitating mobility on all modes of transport in the Oise region in the following areas: ticketing, fleet tracking, multimodal info system, taxi and carpooling management, mobility agent, and transport on demand.

Organisation: VIX-TECHNOLOGY and CITYWAY

Partners in the project/initiative:
♦ SMTCO (the Oise Joint Transport Union)
♦ Cityway
♦ VIX-TECHNOLOGY

SMTCO represents 13 Transport Authorities in the county of Oise. SMTCO and its partners have entrusted Cityway/VIX-TECHNOLOGY with the task of setting up and operating the SISMO for a 12-year period. Cityway is specialised in the field of software development for New Information and Communication Technologies for public transport. VIX-TECHNOLOGY is a major player in ticketing in France. For over 20 years, it has designed, installed and maintained computerised ticketing systems for public transport around the world.

Launch date: 1/08/2010
End date: 31/03/2012

Objectives

SISMO will facilitate passengers’ access to public transport and travel information via different channels (internet, mobile phones, station displays, information on board vehicles, etc.). Real-time tracking of taxis and transport on demand will optimise
transport and shorten the time between a reservation call and provision of service. The project will ensure: global information for travellers; sales and after-sales services; taxi management; carpooling info and booking for transport on demand; traffic information in real time; and detailed reports on transport availability and usage.

**Contribution to the PTx2 strategic goals**

The SISMO project places the customers’ needs and lifestyle at the core of mobility services by allowing them to use all networks and all means of transport in the best, easiest and most informed way possible. For the authorities and the transport operators, the SISMO project is the key to successful public transport planning. The Cityway/VIX-TECHNOLOGY solution will enable each authority to consider new mono-modal or combined fares, new forms of shopping for travellers, new information channels, and will give operators the possibility to measure the impact immediately in terms of service supply and usage. The investment will bring benefits to all players in the short/medium/long term by promoting a smart way of travelling and encouraging travellers to leave their own private means of transport at home with the immediate benefit of establishing a greener way of living and maintaining an interactive, coordinated dialogue among all mobility stakeholders in the county.

**Financing scheme of the project / initiative**

SMTCO wanted to ensure the system was kept at the cutting age of technology and innovation over the 12 years of the contract, and therefore decided to adopt the formula of Public Private Partnership (PPP) according to French law. As SMTCO is the public and main contractor, they entrusted the joint venture Cityway/VIX-TECHNOLOGY, the private contractors, with the task of designing, installing and maintaining the system, and asked for a detailed business plan with performance targets and terms of adaptation to future technological developments.

**Description**

The SMTCO (the Oise Joint Transport Union) represents 13 Transport Authorities: the county of Oise, the Picardie Region, and the cities of Beauvais, Creil, Compiègne, Liancourt, Chantilly, Pont Sainte-Maxence, Noyon, Crépy en Valois, Senlis, Sablons, and Pierre-Sud-Oise. SMTCO entrusted the joint venture Cityway-VIX-TECHNOLOGY with the task of implementing an Integrated Service for Mobility in the Département de l’Oise (Oise County) (SISMO). This project is innovative because it is a public-private partnership and manages mobility in Oise County covering all means of transport.
In order to simplify mobility in Oise County, SISMO will introduce a set of innovative measures:

- A ticketing system used on all public transport networks using a single smart card that allows travellers to use all networks;
- A passenger counting system on free networks;
- Real-time tracking equipment to monitor usage of the service and the road network;
- A multimodal information service available on all media: internet, mobile phones, call centres, and mobility agents, to allow passengers to prepare for their journey by calculating the route, choosing the appropriate fare, and purchasing the ticket (physically or electronically), for all modes of transport and using real-time information;
- A central office collecting info from all sub-systems and a booking centre for all modes of transport available in the county (including the management of transport on demand, carpool and taxi services);
- A visual and audio information system on board vehicles, at main stops and interchanges.

Such a sophisticated and complete system required the latest technology provided by Cityway and VIX-TECHNOLOGY, with the goal of making travelling smoother and easier for passengers.

A specific feature of the project is the establishment of a mobility observatory, a real ‘control tower’, centralising all data from different systems and highlighting areas for improvement, thanks to statistical data on the activity of urban and interurban transport in the county.

VIX-TECHNOLOGY and Cityway have designed their proposal with two ideas in mind: avoid the duplication of hardware and software whilst maintaining system independence in order to facilitate the evolution of each component in the long term, thanks to the sharing of technical elements and a common system of organisation.

SISMO is the first time in France that components that are usually managed separately by local transport operators have been integrated into one system: information for passengers, ticketing and AVM. The benefit of the operation lies in sharing a single repository consisting of all relevant data useful for time/itinerary/price information and consulting it on a multimodal device chosen by the passenger. SISMO will also be able to calculate the route, the mode of transport or the tariff that best suits the needs of travellers.

The strength of the above solution is to rely on the latest generation of equipment (PC/onboard consoles, outlets, station displays, etc.) and innovative applications that bring together all the experience acquired over several years by VIX-TECHNOLOGY in over 200 projects and by Cityway.

The SISMO project will last 12 years, as a PPP (Public-Private-Partnership).

The major steps to deploy in the first two years are:
- August 2010 ➔ Mobility centre – Information and TAD booking systems
- December 2010 ➔ Internet site, multimodal and carpool route planner systems
- March 2011 ➔ Real-time information system (vehicles, stops, routes)
- September 2011  ➔ Ticketing and passenger counting systems
- March 2012  ➔ Taxi services – Deployment of all services/networks

The project is designed to allow further technological updates for the duration of the contract.

**VIX-TECHNOLOGY** is a major player in ticketing in France and all over the world. For over 20 years, it has designed, installed and maintained computerised ticketing systems for public transport around the world.
[www.vixtechnology.com](http://www.vixtechnology.com)

**Cityway** is specialised in the field of software development for New Information and Communication Technologies for public transport.
[http://www.cityway.fr](http://www.cityway.fr)
SWEDEN

Doubling public transport in Sweden

Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.

Project/initiative: Doubling public transport in Sweden - From vision to service contract - Common sector guidelines for the procurement and contracting process

Organisation: The Swedish Public Transport Association (Svensk Kollektivtrafik)
www.svenskkollektivtrafik.se - www.fordubbling.se

Partners in the project/initiative:
♦ Swedish Public Transport Association
♦ Swedish Bus and Coach Federation
♦ Association of Swedish Train Operating Companies
♦ Swedish Association of Local Authorities and Regions (SALAR)
♦ Swedish Taxi Association
♦ Swedish Transport Administration

Launch date: 06/2010
End date: 2020

Objectives

In 2009, the sector presented a report ‘Business Model for Doubled Public Transport’ as basic input on how public transport should be developed in order to double the market share and travel volume. This report was followed in 2010 by ‘The Contract process: from plan to contract to double travel by public transport’. The purpose of this report is to provide guidelines on how the sector, with the help of developed contract forms, should work towards the doubling goal. The guidelines are tools for authorities and operators to be used in the process from vision to contracts.
The core of the contract process is a recommended approach, which incorporates an inherent driving force to attract more customers in a resource-effective way. This includes the process which will lead to the most suitable type of contract model in relation to the goals to be achieved. Parts of the guidelines include support for choosing the best contract model and striking a balance between the political and business side of the service contracts. Models of contracts are enclosed, covering for example service concession contracts, net model contracts, incentive contracts and gross contracts. These model contracts contain the basic commercial conditions. The process creates a solid business framework. The Operators will be better placed to deliver services with the expected quality level and boost business development. The process is aimed at increasing entrepreneurship and reducing micromanagement in favour of management by objectives.

The project was financed by funds from the Associations within the sector. Now we will begin setting up an organisation that will monitor how the process is implemented. This organisation is also funded by the Associations within the sector. Working resources come from member companies, from both operators and transport authorities and from law firms.

At the beginning of 2008, a united public transport sector in Sweden presented the Ministry of Enterprise, Energy and Communication with its goal to double the market share of public transport in the somewhat shorter term and the volume of travel by public transport by 2020. Included in this ‘Partnership for a doubling of Public Transport’ are the Swedish Public Transport Association, the Swedish Bus and Coach Federation, the Association of Swedish Train Operating Companies, the Swedish Taxi Association and the Swedish Association of Local Authorities and Regions.

In Spring 2009, the sector presented its expert report entitled ‘Business Model for Doubled Public Transport’ as basic input for a discussion on how public transport should be developed.

The purpose of this report is to give a concrete form to the proposals in the Business Model and to provide proposals for the way in which the sector, with the help of developed contract forms, should work towards achieving the doubling goal. The report is a tool for purchasers, transport companies and local authorities in their common efforts to create contracts that ‘drive’ development in this direction. The process is aimed at increasing professionalism and entrepreneurship and reducing micromanagement in favour of management by objectives. The core of the contract process is the recommended approach, which incorporates an inherent driving force to
attract more customers in a resource-effective way. This is the process which - in a transparent, confidence-inspiring way - will lead to the most suitable type of contract in relation to the goals we wish to achieve. It is a question of a step-by-step approach based on a carefully considered process.

The present situation describes how work is currently conducted within the sector on different types of contract. The next step involves reflections on the role public transport should have in the future based on the common sector vision, the doubling goal and the shared values that constitute the basis for the common sector investments in seamless co-operation in order to achieve the doubling goal. After this the political platform for the work on contracts is studied within each region, i.e. the regional plan developed by the purchaser in which public transport is viewed in a wider context.

With this as a basic starting point, what can the various sector players do in order to contribute towards the doubling goal and the vision? In other words, what is the purpose of/game plan for the future contracts? Subsequently, an account is given of what it is important to achieve with the agreement, i.e. the goals, and what needs to be done in order to achieve these goals.

The analyses and discussions in the first five steps of the working process serve as the basis for a discussion between the parties in the next step in a process that is referred to as Consultation before Procurement. Once this has been performed, the next stage involves addressing the question of the most effective way of dividing up the work between the parties. This will lead to the conclusion on which form of contract is the most suitable bearing in mind the established goals, the adopted division of work between the parties, etc. In the final stage, the question of how the contracts are followed up is discussed.

In order to acquire a concrete impression of what should be included in the different types of contract in relation to desired outcomes, an account is given in Enclosures of special model agreements for service concession contracts, travel incentive contracts, production contracts, co-operation contracts and contracts for sub-order-directed transport services. These model contracts contain the basic commercial conditions and thus constitute a stable platform on which the parties can work towards common goals. Consequently, the agreements do not specify in detail the actual approach.

The contract process is aimed at a wide target group. It is important that both politicians and officials on different levels in the various authorities, organisations and companies within the sector have a sound knowledge of how the contract work should be conducted. In this way, the contracts will be able to play their role as strategic tools for increasing the volume of travel and the market share.
SINGAPORE

Key Initiatives of Singapore’s Land Transport Masterplan (LTMP)

Project submitted as part of the UITP PTx2 Awards. All information correct as of January 2011.

Project/initiative: Key Initiatives of Singapore’s Land Transport Masterplan (LTMP)
Organisation: Land Transport Authority (LTA)
http://www.lta.gov.sg

Partners in the project/initiative:
- Diverse stakeholders including public transport commuters, operators, motorists and experts
- Urban Redevelopment Authority
- Housing and Development Board
- Town Councils

To address new challenges in Singapore’s land transport system, the Land Transport Authority (LTA) undertook a comprehensive Land Transport Review in 2006. The Review gathered feedback from stakeholders including public transport commuters, operators, motorists and experts. This ensured that their diverse views were considered in the proposed Land Transport Masterplan (LTMP) initiatives. Stakeholder support and the cooperation of other Government agencies are required to implement these initiatives. LTA has to work closely with operators to make public transport more attractive. Working with the Urban Redevelopment Authority, Housing and Development Board, and Town Councils is also critical to integrate transport with land use and make public transport more accessible.

Launch date: 2009
End date: 2020

Objectives

LTA’s vision is to develop a more people-centered land transport system that will meet the needs of an inclusive, liveable and vibrant global city. Specifically, the LTMP has set the target of increasing the public transport mode share during the morning peak
period from 59% in 2008 to 70% in 2020. This is a challenge, as average daily journeys are expected to increase from about 10 million in 2008 to 14.3 million in 2020. We will be able to double 2008’s 5.6 million daily public transport journeys to about 12 million by 2025.

**Contribution to the PTx2 strategic goals**

The LTMP aims to significantly expand the public transport capacity in Singapore by doubling the rail network to 278km by 2020 and enhancing the capacity on existing rail lines through upgrades to the signalling system. LTA took over central bus planning to plan the public transport network from the commuters’ perspective. Distance-based through-fares were introduced to remove the intermodal transfer fare penalty and encourage commuters to take the most efficient routes. Buses will get greater priority on the roads through more bus lanes and a scheme that mandates motorists to give way to buses coming out of selected bus bays. LTMP aims to shorten public transport journey times and enhance commuters’ journey experience. It will improve the accessibility with more covered linkways. More integrated rail-bus transport hubs with commercial activities will be built for seamless transfers and convenience. Real-time public transport information will be available on mobile platforms for commuters.

**Financing scheme of the project / initiative**

Most of the major capital costs of the schemes such as the rail network expansion proposed in the LTMP will be borne by the Government. A sound financing framework is necessary to ensure prudent use of government funds. The guiding principles of the financing framework are (i) financial sustainability, where the revenues from the operation of the system have to cover the operation and maintenance costs as well as asset replacement costs. There will be no operating subsidies from government. Next is (ii) economic sustainability, where the cost-benefit ratio of the project needs to be positive.

**Description**

Land transport plays an integral role in Singapore’s economic and physical development. With 10 million daily journeys today and this figure projected to increase to over 14.3 million by 2020, the growing travel demand has to be largely met by public transport. Given the land constraints, this is the most effective and sustainable way to meet Singapore’s aspirations of being a vibrant city to live, work and play in.

To address new challenges in Singapore’s land transport system, the Land Transport Authority (LTA) undertook a comprehensive Land Transport Review in 2006, which involved gathering feedback on Singapore’s land transport policy and issues from public transport commuters, operators and practitioners. The Review led to the launch of the Land Transport Masterplan (LTMP) with its vision of a people-centered land transport system.
Through the LTMP’s three strategic thrusts – make public transport a choice mode, manage road use, and meet diverse needs - LTA aims to increase the public transport mode share during the morning peak period from 59% in 2008 to 70% in 2020. And by 2025, we will be able to double today’s 5.9 million daily public transport trips to about 12 million.

Singapore aims to double the MRT network to 278km by 2020 to make rail the backbone of its transport system and meet the growing demand for travel. The extended and denser MRT network will be accessible to more people. For those who work or live in the city centre, commuters will be able to reach a MRT station within a 400m or 5-minute walk. Additionally, existing rail lines will be extended and their capacity enhanced by re-signaling and increasing the frequency of trains. Complementing this, to improve bus speeds, buses will be given greater priority on roads through more bus lanes and signal priority at major junctions. The Mandatory Give Way to Buses scheme will also be extended so that more buses can easily exit from bus bays.

Under the LTMP, the LTA has taken over the role of central bus network planner in order to holistically develop an integrated multi-modal public transport network, thus enhancing the efficiency of the public transport services. It will plan the public transport network, focusing on the ‘total journey’ experience of commuters. In July 2010, a Distance Fares system was implemented to enable commuters to choose the best ways to get to their destinations without worrying about having to pay extra if they make transfers between buses and the Mass Rapid Transit system (MRT).

The whole travel experience of commuters will be enhanced with more comfortable walking environments such as covered link ways and underpasses to public transport nodes. More fully integrated transport hubs will be built, where bus interchanges and rail stations co-locate with commercial activities, thus making transfers comfortable and convenient.

Singapore adopts demand-management measures to control private transport ownership and usage to ensure long-term sustainability. The ownership measures ensure that vehicle population growth is constrained to a level that can be supported by the road network. The Electronic Road Pricing System will be enhanced for more effective congestion management. Possible options based on the Global Navigation Satellite System technology that do not require physical gantries are being studied.

The LTMP exemplifies Singapore’s continuous process of innovation and adjustment to develop a people-centered land transport system that meets the evolving travel needs of Singapore. LTA’s commitment to envision and implement a much improved integrated public transport network is paramount to the success of an efficient and cost-effective land transport system.
LT MASTERPLAN
A People-Centred Land Transport System