initiative

Company Newsletter of INIT Innovations in Transportation, Inc. for business partners, employees and friends

Dallas Light Rail is on the Move.
Super light rail vehicles get INIT technology.

Dallas Area Rapid Transit (DART) continues to move forward in expanding their light rail network. In a recent decision to purchase 48 additional SLRV's, they awarded INIT another contract to install a Vehicle Business System with an Automatic Passenger Counting System on the new vehicles with integration into the fleet management system. The partnership between INIT and Kinkisharyo International, the Japanese-based manufacturer of the SLRV's, gives DART the distinct advantage of having the INIT technology installed right at the manufacturing plant.

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10 init years in North America

Dear Transportation Professionals,

As a Radio Frequency Systems Engineer for INIT, my responsibilities revolve around how to best meet the customer proposal requirements for voice and data radio systems, and implement those solutions when INIT is chosen as the preferred vendor.

First, it is my job to thoroughly review a customer's written request defining their current voice and data systems, and to determine its feasibility to support the voice and data needs of a modern day CAD/AVL system. Our radio department works with our sales team to determine customer desires, budget constraints and schedule requirements to determine the most economical way to meet their needs.

> **Christopher Carey**
RF Systems Engineer

Second, it is my responsibility to manage the implementation of our proposed voice and data radio systems in order to support the needs of our customer and our CAD/AVL system, MOBILE-ITCS. Due to the complexity of integrating various radio systems with our INIT fleet management software, we try to utilize the transit agency's local radio shop when designing, installing and testing the new radio system. By leveraging their experience and ongoing partnership with the transit agency, this helps to keep the overall project schedule on track, but also strengthens INIT's relationship with our customer. Positive, ongoing partnerships between the transit agency, local radio shops and INIT help us to provide the best possible long-term support of our systems.

The success of a project can ultimately be credited to a clear understanding of the contracted services, timely installation and testing, and a positive relationship with the customer. Not everything on a project will go as planned, but working together as a team to find practical solutions leads to project success.

Chris Carey

Editorial

PIDscreen – The passenger information sign with TFT display.

High-end technology for stop displays.

> **The PIDscreen brings color to stops.** And, if you want, even videos in DVD quality.

Real-time passenger information is a central part of the service offered by transport companies today, and reliable and convenient passenger information influences the impression customers form of the quality of a service. Until recently line-based LED displays or LED matrix displays were used to inform passengers about the destination, line number and arrival time of the next service. Now, the development of advanced TFT-display technology allows the construction of large-size stop displays with video capability.

INIT has made full use of these latest advances to create the new **PIDscreen** TFT displays for outdoor use. The new technology allows transit companies to display all kinds of character sets including Arabic, Chinese, Japanese or Greek letters. It also displays pictures, pictograms, maps, animations, and even videos in DVD quality. INIT's **PIDscreen** opens up new possibilities for passenger information at period stops.

Robust design for maximum reliability.

The 37" color TFT display features a high resolution of over a million pixels. Thanks to the integrated brightness sensor, the background lighting automatically adapts to the ambient light conditions ensuring excellent legibility. This is further enhanced by the coated 6 mm antiglare safety glass screen, which like the stainless steel housing, is weather and vandalism-proof. Several temperature sensors and an efficient cooling system protect the display from over-heating.

The **PIDscreen** is controlled by a high-performance single-board computer featuring a number of interfaces with a purely digital connection to the display. To ensure optimum reliability, the Windows® XP Embedded operating system as well as the applications are stored on a CompactFlash card. Memory cards of 512 MB are sufficient to guarantee basic functionality of the RTPI display. If additional storage of multimedia data is required, cards with higher capacity of up to 8 GB are available that can provide high-quality video streams for several hours.

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DART continues to move forward with INIT Solution.

New Vehicle Business System plus Automatic Passenger Counting.

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DART had previously purchased 115 Light Rail Vehicles (LRVs) from Kinkisharyo with INIT's Vehicle Business System being integrated in the INIT fleet management system that supports dispatchers in optimizing operations. The vehicle equipment includes on-board computers, mobile data terminals with built-in card readers, a global positioning system, as well as a GPRS data radio communication system. **MOBILE-APC**, INIT's automatic passenger counting system will generate counting accuracy results of 96% or better.

The APC technology will give DART additional reporting functionality which will improve schedule adherence and optimize transit resources.

Furthermore, DART officials cite the other main advantages of the system as:

Minimization of hardware on vehicles, flexibility with trip add-ons or re-routes, as well as the benefit of one source for reports and data.

DART passengers will also benefit from the new technology through real-time information at station displays as well as automatic next stop announcements-all generated by the on-board computers. Dallas dispatchers will be able to determine vehicles' location and communicate event messages via the central Computer-Aided Dispatch / Automatic Vehicle Location system (**MOBILE-ITCS**). This system in turn, will interface to a Public Announcement / Visual Message Board (PA/VMB) system and to the Supervisory Control And Data Acquisition (SCADA) system for reporting purposes.

The agreement between INIT and DART proves to be another example of the long-term partnerships INIT has with its customers. The additional 48 vehicle installations bring the total fleet count to 163.

> **Some 10 million passengers a year** take DART light rail. INIT technology provides them with easy to access real-time passenger information.

About DART.

Dallas Area Rapid Transit serves Dallas, Texas and 12 surrounding cities encompassing a 700 square mile service area. DART operates approximately 130 bus routes, 45 miles of light rail transit (DART Rail), 75 freeway miles of high occupancy vehicle (HOV) lanes, and paratransit service for the mobility impaired. Through 2014, the DART Rail System is slated to more than double in size to 93 miles with further extensions in commuter transit to include 110 miles of high occupancy vehicle lanes.

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Other projects with advanced ITS technology from INIT include:

> Houston Metro Houston, TX

> New York City Transit, New York, NY

> York Region Transit, York, Ontario

> TransLink, Vancouver, B.C.

> RTD, Denver, Colorado

Real-Time Passenger Information

Taking the next step with RTPI technology.

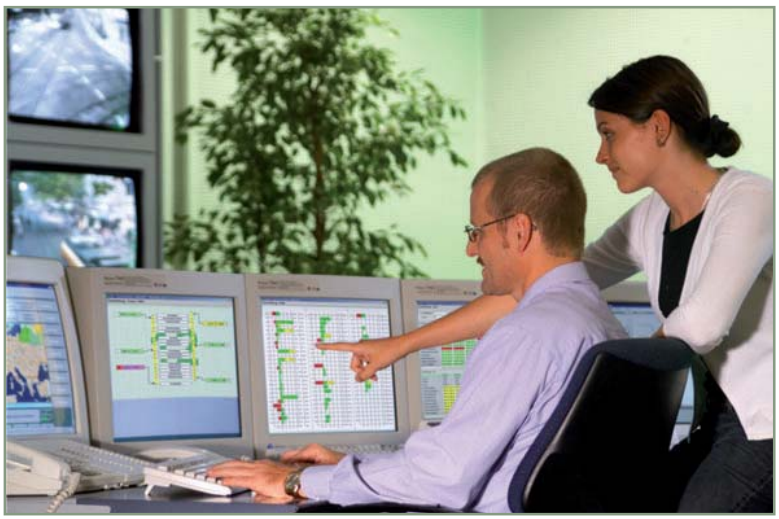
Do something good for your customers and let them know about it. This is the central idea of successful marketing. It's unthinkable that an agency would keep quiet about their efforts to please their customers, especially when it comes to informing them about delays or disruptions in service. Communicating this information is a positive factor directly linked to the public's satisfaction with public transit. After all, the passengers need to know exactly how long they will have to wait for the next bus or train, or whether they need to consider an alternate mode of transport.

In today's fast-paced environment, solutions for efficient time management require public transit agencies to be forward-thinking. Sometimes the best 'good' you can do is to effectively communicate with them when a delay in service occurs. Today, real-time passenger information is not an option for those wanting to positively affect transit services or increase customer satisfaction.

When service disruptions occur, the most important aspect to consider, besides restored service, is to inform the waiting passenger. Experience has proven that displaying the actual waiting time at stops is perceived as a reduction of the waiting time, which in turn, leads to increased passenger satisfaction. So the goal is to make service for passengers as attractive and reliable as possible.

Today, more and more agencies realize the need for action and have laid the foundations, both organizationally and technically, to solve this problem. But this is not all about marketing or looking good. Passenger information is also an effective instrument to sell transportation service. So, where's an agency to start?

Finding the right technology provider to automate the information process as much as possible is the first step in providing superior service to customers. Next, the transit agency will have to provide the necessary manpower for troubleshooting and informing passengers on a minute by minute basis.



> **Many agencies are making use** of Passenger Information Officers to keep the public informed and connected.

Since a dispatcher's prime objective must be to troubleshoot, a second staff person with specific skill sets is needed. We'll call him the Passenger Information Officer or PIO. His role should be to totally focus on the passengers and their need for information when a disruption in service occurs.

Step 1: Passenger Information Officer - a new role.

The PIO depends on valuable support from a dynamic passenger information system that provides clear displays demonstrating problem areas; an advanced solution that will thus enable him to get an immediate operational assessment and overview. With **MOBILESTOPinfo** integrated with the ITCS by INIT, the PIO can view the operational traffic measures already initiated by the dispatchers, and speedily and efficiently access various scenarios for relaying the necessary information to passengers.

The first step for the PIO is to notify the passengers as quickly as possible about the type of incident and how it may affect their trip. With instant information given automatically by the system, the public transport company can inform the public that they are taking care of the current problem while giving first level information on the disturbance.

Step 2: The software solution - instant information for customers.

In the event of a major incident, usually the following questions must be answered for the waiting passenger:

> What happened?

> How does it affect me?

> How long will it take?

> What are my travel options?

Through **MOBILE-STOPinfo**, the advanced Real-Time Passenger Information

software solution from INIT, a mass of information can be spread to the public automatically and within seconds. **MOBILE-STOPinfo** integrated with INIT's advanced CAD/AVL software, **MOBILE-ITCS,** considers various system alerts and automatically communicates the effects of dispatch measures already carried out or in preparation. Due to predefined texts that are linked to the specific alert or measure, information is transmitted to the connected media immediately. These auto texts make the first level of information given to passengers as precise as possible. Parameter enhanced auto-texts provide initial and prompt information straight from the system.

MOBILE-STOPinfo also offers the recalculation of predicted departure times based on current delays. Because of its integration into the Intermodal Transport Control System (**MOBILE-ITCS**), it also considers the initiated dispatch measures and the consequences of a current disturbance like whether the delayed vehicle can start the next trip on time.

MOBILE-STOPinfo supports the processing of this information for the different media of passenger information including:

> Displays at stops

> Announcement modules at stops

> Displays and announcements inside the vehicles

> Internet and intranet

If, for example, the dispatch measure "detour" is selected, different information has to be displayed at the related stop displays. If the stop is

a. ahead of the detour (in which case the modified route is of interest)

b. within the detour and is not serviced

c. along the detour and is serviced by a route which usually does not run this section, or

d. is past the detour and thus runs on a different schedule,

MOBILE-STOPinfo takes this into account and creates specific information for all four sections. Thus each passenger gets the information that is relevant for him.

Individual real-time information.

But this system-controlled automatic passenger information is not always sufficient to completely inform waiting passengers. Passengers have to be notified about their travel options in order to get to their destinations as fast as possible. This is where individual texts have to close the information gap. This information has to provide the passenger with the necessary facts he needs to decide how to continue his trip as best as possible. INIT completely empowers the PIO with efficient text generating tools that allow him to spread individual information fast and convenient through all requested information media. Since passengers have already been automatically provided by the system with the basic information, the PIO now has enough time to catch up on the concrete situation and to generate suggestive actions for the passengers.

With this two-step approach of **MOBILE-STOPinfo**, integration into the ITCS, and the appointment of a Passenger Information Officer, transit authorities can install a progressive passenger information service. In turn, they can provide their passengers with all the necessary information, while at the same time communicate the measures they are taking to optimize the service. This is key for agencies to experience a definite positive change in public image. Because satisfied and informed passengers are returning passengers, the agency will truly be doing something good for their customers. And, they WILL be talking about it!

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> **PIDmatrix by INIT keeps customers well-informed** and increases their satisfaction with public transit.

Follow-up Orders from Oslo and The Hague.

INIT quality persuasive in major European cities.

> **The Hague decided to manage** their tram and also their bus services with an INIT system.

A company knows it has done a good job when its existing customers keep coming back. For INIT, the transit agencies of Oslo represent one of these satisfied customers. Since 2004, INIT and Trafikanten Oslo have been creating one of Europe's most modern fleet management and RTPI systems in public transit. This first project included implementing an Intermodal Transport Control System, and equipping more than 1,000 vehicles. One of the major goals was to improve Real-Time Passenger Information. Last year, INIT was commissioned with integrating the RTPI system of the subway service and installing 60 LED passenger information displays — **PIDstation** — for Oslo's subway.

Oslo system continually growing.

INIT has now received another follow-up order from Oslo. For Trafikanten Oslo, INIT will equip an additional 222 buses with the vehicle IT platform **COPILOTpc** and the multimedia infotainment display **PIDvisio**. With **PIDvisio**, passengers are kept informed of the next stops and connections along the route.

Buses to follow the tram in The Hague.

Another satisfied customer is HTM (Haagsche Tramweg-Maatschappii), The Hague's transport company. Since 2006, INIT has been equipping about 50 two-way trams — serving the Randstad Rail service — with **COPILOTpc** vehicle IT platforms and the touch screen driver terminals **TOUCHit**. That way, the vehicles are connected to the Intermodal Transport Control System INIT installed at HTM in The Hague. Furthermore, INIT provided the company with the integrated planning and data management system **MOBILE-PLAN** and the personnel assignment software **PERDIS®**. In this way an overall solution has been implemented that makes it easier for HTM to control and optimize their operations and to provide their passengers with real-time information.

Now, HTM has decided to expand the system to more than 150 trams and to the city's bus network. For this purpose, INIT will equip about 145 buses as well as the trams with its sophisticated hardware solution. This clearly shows that HTM is on the way to becoming a satisfied long-standing customer.

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> **Trafikanten Oslo is constantly** extending the ITS system from INIT.

Coast Mountain Bus Company Offers Warm Welcome to Working Group Attendees.

Vancouver, B.C. hosts 5th NA Working Group Meeting.

> **Attendees gain practical insight** through customer presentations and sharing of best practices.

Vancouver, B.C. has become synonymous with the 2010 Winter Olympic Games. That is because in just a few short months they will become host to the global event that will draw hundreds of thousands of people to the city from all over the world. Not to worry, though. CMBC, and its parent company, TransLink are prepared.

Having completed installation of INIT's advanced CAD/AVL system, **MOBILE-ITCS** on over 1,500 vehicles, the agency has been busily preparing for this huge event. In the meantime, CMBC's System Administrator, Marty Williamson, along with Tony Madrid, Radio Communications Advisor and Ed Armstrong, Instructor gave participants a first hand look at the new system during the 5th North American Working Group Meeting which was held at its new training facility in Vancouver, B.C.

Nearly 30 attendees from seven different agencies across North America attended the two day event. Traveling by bus, skytrain and sea bus, attendees got a full experience of the massive transit system. Besides the the tour of the impressive operations center, the visit to Prospect Point was the highlight for all. Boasting the most spectacular views of the North Shore Mountains, the Lions Gate Bridge and the Burrard Inlet, Prospect Point offered a breathtaking panorama from the highest point in Stanley Park.

The next NA Working Group Meeting will be held in Virginia Beach, VA on October 21, 2009 at the Hilton Oceanfront in conjunction with the International User Group Meeting and Transit Symposium. Working Group Meetings are open to all dispatchers, administrators, operators and system managers working with an INIT system.

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> **Work Group participants enjoyed the view** from the lookout at Prospect Point in Stanley Park, Vancouver B.C.

INIT Celebrates 10 Years of Successful Business in North America.

International User Group Meeting & Transit Symposium.

> **INIT, Inc. has experienced constant** growth since its opening in the US ten years ago.

For 10 years now, INIT has been successfully navigating the ITS market in North America. Starting with three employees in 1999, INIT now employs over 50 staff members who are working on improving the future of mobility in North America.

To celebrate our 10 year anniversary, INIT, Inc. will host an International User Group Meeting and Transit Symposium on October 19-21, 2009 in beautiful Virginia Beach, VA. This three day event will offer interactive sessions, hands-on training, technical presentations, as well as tours and events relevant to all facets of INIT's advanced technology solutions.

The Transit Symposium will host speakers from around the world. Those presenting include such guests as APTA President, Bill Millar, Immediate Past Vice Chair of APTA's Executive Committee and current CEO of Hampton Roads Transit, Michael Townes and President & CEO of the Canadian Urban Transportation Association, Michael W. Roschlau, Ph.D. Don't miss this exciting opportunity to hear from the industry's leading professionals and interact with your fellow transit colleagues!

For more information or to register for this event, please visit our website at **www.initusa.com** and click on the 10 year logo.

> **The Hilton Virginia Beach Oceanfront** will be the host site for INIT's User Group Meeting and Transit Symposium.

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Events

October 4 — 7, 2009	**"APTA Annual Meeting"** in Orlando, FL
October 19 — 21, 2009	**"INIT International User Group Meeting & Transit Symposium"** in Virginia Beach, VA
November 7 — 11, 2009	**"CUTA TransExpo"** in Montréal, Québec/Canada

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Interesting