### Saskatchewan Municipal

# **Best Practice**

## TransitLive Configuration

#### CONTACT

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#### THE PRACTICE

CRL builds transportation monitoring systems for municipalities. The original concept for this idea came from several research results accumulated over the last 10 years. CRL's flagship product is TransitLive, which is a system whose goal is to improve the riders' experience and at the same time help the city manage their fleet in real time. This includes accounting for, and recording delays and other incidents.

CRL's TransitLive provides many benefits to the transit users, such as the provision of bus location, accurate bus arrival times, personalized reminders, preferred routes and a variety of other things. This is aided by its ability to send and receive customer calls through telephones, mobile phones, text messages and the Internet.

Transit authorities also benefit from the TransitLive, since real-time information is constantly made available to operators, which makes it possible to manage the bus fleet effectively and efficiently. Security alert features are also enhanced using TransitLive. CRL's main strength is the uniqueness of its development activities and platform, which allow very low cost independent development and integration. This translates into three main competitive advantages: cost efficiency, flexibility and hardware independence.

TransitLive enhances the public transportation system of a municipality with real-time information. This makes public transportation much more viable. The immediate benefit of this ease of use is increased ridership. This also provides a direct economic benefit to the public because of reduced use of personal transportation. The induced set of services created by the system, including the video capability, Internet provision on the bus and location-based advertising provide for an economic development opportunity for other businesses in the City. The implementation of TransitLive also reduces the use of personal transportation therefore reducing greenhouse gas emissions. This is easily computed by the system and can be communicated directly to the public.

#### THE PROCESS

The business model proposed in the collaboration between CRL and the City of Regina is a traditional service model. Therefore, the steps involved in its implementation are extremely simple. The first step is the identification of initial needs of the municipality, which forms the basis of a service contract. The requirements can be expanded or modified at a later date as the system's flexibility allows for changes, but having an initial set of requirements is important in guiding the implementation. If procurement is involved and an RFP is needed, this step can be preceded by a formal publication that allows a fair selection process. This phase also allows the definition of customized success metrics.

If the implementation is approved, the second step involves deployment of the bus hardware in the buses. This is generally accomplished through the municipality's transit service, whose technicians know the current bus maintenance schedule and therefore can work without service interruptions.

The third step is the initial testing of the system and the schedule acquisition. During this phase, the system is offered for evaluation to transit personnel. This learning phase allows the complete customization of the system.

The final phase is the system implementation. This phase is set in a continuous improvement context where existing features are provided to the public, and new features are evaluated and provided on demand.

#### THE RESULTS

A formal evaluation is still in progress and its results are not available. However, a measurable percentage of the ridership has decided to continue riding the bus instead of abandoning it in favour of using personal transportation during the winter months. This success is complemented by the ability of transit to track buses and predict potential disruptions, which results in greater awareness and higher probability of avoiding service disruptions. Transit can also now answer queries from the public with better clarity as they can examine the path of any bus and confirm the time of each stop.

TransitLive in its current form is present in approximately 20% of the buses in the City of Regina. The evaluation of this implementation has been carried out by gauging the response of the public to the system and the amount of use of the system. In the last month of operation it was accessed by 7,000 separate IP addresses, has accumulated more than 27,000 text message service requests and is processing 250 text message requests per weekday. An ongoing evaluation is focused on collecting information on the changes in ridership.

#### **LESSONS LEARNED**

It is important to conduct a joint needs assessment before implementing the system. Although the flexibility of the system allows for profound changes, an initial assessment will reduce the cost of implementation.

Provisioning processes, budget availability and requirements will also have an affect on the implementation of TransitLive.