



Hastus Software Upgrade

Presented to: Organizational, Service and
Performance Monitoring Committee

September 1, 2020

Intelligent Transportation Systems (ITS)

The department's primary responsibility to manage software applications and supporting technology to improve and enhance RTA's Operations division.

Current Applications	Function
MARCS Radio System	<ul style="list-style-type: none"> Voice communications for buses, trains and field supervision RTA manages 895 radios to provide service to riders
TransitMaster	<ul style="list-style-type: none"> GPS tracking and management of buses and trains Real-time information for riders
Mobile Routers	<ul style="list-style-type: none"> Passenger Wi-Fi Provides the data connection for buses and trains 2 SIM cards per vehicle: FirstNet for Operations and Commercial cellular for passengers
Ultramain	<ul style="list-style-type: none"> Vehicle and Facilities Maintenance Inventory and Supply Chain Management
Hastus	<ul style="list-style-type: none"> Operator Scheduling and work assignment Route scheduling and service frequency
NICE	<ul style="list-style-type: none"> Radio and Phone recorder for dispatch offices and control center
GenFare	<ul style="list-style-type: none"> Fare collection and farebox monitoring
Paladin	<ul style="list-style-type: none"> Red Line public address system and visual display
Spillman	<ul style="list-style-type: none"> Transit Police dispatch and records systems

Hastus

The screenshot displays the Hastus software interface, which is used for managing transit schedules. The main window shows a list of vehicle schedules under the heading 'Vehicle schedules / By booking / 2008H'. The list includes columns for Name, Sched Type, No., Booking, Description, Service Context, Sch Unit, and P. Own.

Name	Sched Type	No.	Booking	Description	Service Context	Sch Unit	P.	Own
hh2008a1	Weekday	40	2008H	01 Hayden Fall 2020	base-hayd	hayd-vsc	<input checked="" type="checkbox"/>	PROC
hh2008a1	Weekday	41	2008H	01 Hayden Fall 2020 - remove #41 school trips	NoSchool	hayd-vsc	<input type="checkbox"/>	SCLIF
hh2008a6	Saturday	40	2008H	06 Hayden Fall 2020	base-hayd	hayd-vsc	<input checked="" type="checkbox"/>	PROC
hh2008a6	Saturday	41	2008H	06 Hayden PATCH 66R bypass route :30 service	66Rbyp30	hayd-vsc	<input checked="" type="checkbox"/>	SSHE
hh2008a7	Sunday	40	2008H	07 Hayden Fall 2020	base-hayd	hayd-vsc	<input checked="" type="checkbox"/>	PROC
hh2008a7	Sunday	41	2008H	07 Hayden PATCH 66R bypass route :30 service	66Rbyp30	hayd-vsc	<input checked="" type="checkbox"/>	SSHE
hh2008a7	Sunday	42	2008H	07 Hayden Labor Day 2020 Holiday Pick	LaborDay	hayd-vsc	<input checked="" type="checkbox"/>	SSHE

Below the main window, a smaller window titled 'vsc02 - Manage Vehicle Schedules - [2008H- hh2008a1 Weekday 40 01 Hayden Fall 2020]' is open. This window displays a detailed view of a specific vehicle schedule, showing a grid of blocks, start times, and durations. The grid includes columns for Block, Start, and various time slots (1b through 5p), along with Duration and Distance. The data is presented in a complex, multi-colored format, likely representing different vehicle types or routes.



Vendor: GIRO

- RTA's current, software vendor for scheduling and bid dispatch
 - Manages operator's work performance, scheduling, daily work and payroll
 - Most recent upgrade was in 2012
- Proprietary software and hardware
 - Sole Source
 - Perform installation, testing and product support

Project Scope

1. Process Review
2. Hardware Upgrade
3. Software Upgrade
4. Training
5. Support

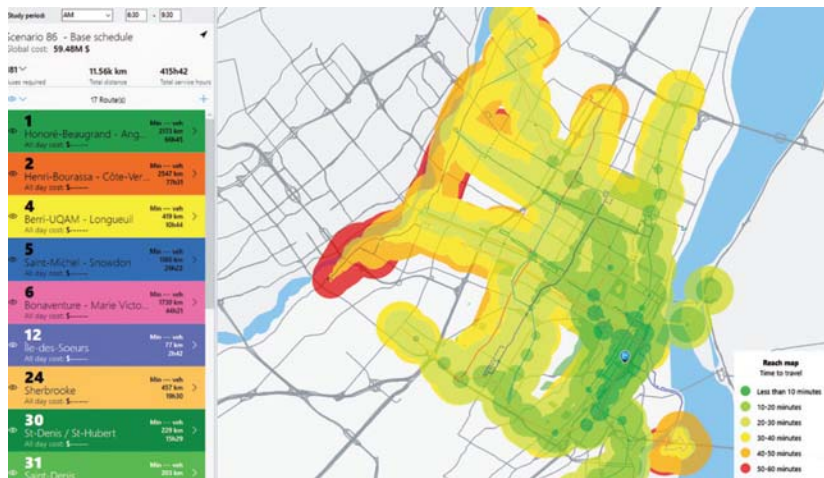
Key New Features

More than 100 new/useful features between our current version and newest version

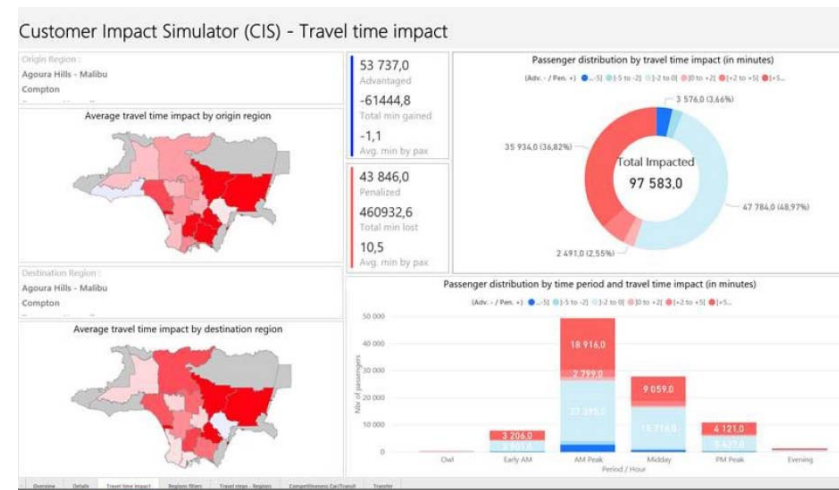
New Features	Purpose
Automatic Trip Generation	Tools based on desired frequency by route and time period
Enhanced Algorithms	Optimization balances quality and operations costs, determine optimal trip start times, etc.
Graphical Tools	Schematic representation of transit network and services
At-a-Glance Mapping Interface	Visualize and manage the network map with the comparison of different scenarios (service frequency, ridership, transfer quantity, etc.)
Customer Impact Simulator	Compares passenger travel times on proposed networks. Dashboard creation allows for enhanced finding in a presentation format.

Key New Features

Map-based Interface



Customer Impact Simulator



Projected Project Schedule

Task	Estimated Completion
Project Kickoff	October 2020
Process Review	November 2020
Hardware Replacement	February 2021
Software Upgrade (3 Phases)	March 2022
Acceptance	April 2022
Project Closeout	May 2022

Project Expense

Hastus Software Expense

GIRO Expense	Scheduling Modules	Operations Modules	Total
Fixed Route/Paratransit	\$356,724.00	\$241,243.00	\$597,967.00
Services	\$120,155.00	\$419,505.00	\$539,660.00
NetPlan	\$176,775.00		\$176,775.00
Total	\$653,654.00	\$660,748.00	\$1,314,402.00