



The complete software solution for optimized transportation

GIRO's *HASTUS* software suite offers a flexible, integrated, and modular solution for planning, scheduling, operations, customer information, and analysis, as well as allows integration with third-party systems. The software covers all modes of public transportation including bus, BRT, tram, subway, and light rail.

Key features

- Planning modules with network and timetabling functions that permit multimodal service synchronization.
- Scheduling modules featuring powerful optimizers to create cost-saving vehicle and crew schedules, as well as multiday rosters.
- Daily operations modules to help manage changes to planned service and vehicle-operator assignments, and produce accurate payroll input. Mobile and Web-based applications allow for direct interaction with operators and other front-line personnel.
- Customer information modules that provide detailed trip planning and stop level information.
- Analysis modules to evaluate run times and ridership data for improved use of fleet and service to customers. A Business Intelligence module helps highlight trends observed in historical data.
- A suite of software integration tools, *Connect*, for reliable real-time or delayed interfacing with third-party systems, such as HR, payroll, AVLs, and more.

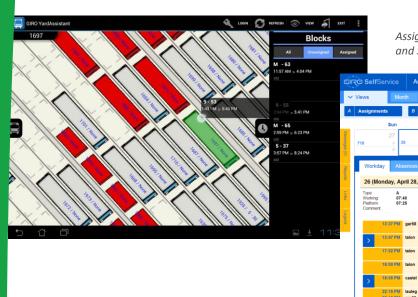
Key benefits

- Improves quality of service through more accurate runtimes, service frequency, and synchronization.
- Delivers unmatched optimization for both planning and operations which translates into cost reductions and greater employee satisfaction.
- Enables better decision making based on readily available and upto-date data in the context of live operations.
- Provides accurate and standardized payroll inputs.
- Ensures integrity of all servicerelated data by eliminating multiple sources and double entry of information.



The *HASTUS* suite is highly configurable and allows the software to be tailored to the specific needs of each operation. Every installation is supported by world-renowned GIRO expert services to ensure that public transportation companies obtain maximum benefits from the software.

The software leverages different technological platforms (desktop, Web, mobile) to provide an optimal experience for different user profiles and provides versatile reporting tools, including Crystal Reports[®] and Micro-Strategy. GIRO undertakes significant R&D annually to ensure continuous product evolution as operational requirements and technology evolve.



Assigning blocks to vehicles with YardAssistant (left) and SelfService display (below)

SelfSe	ervice A	Assignments \checkmark						1
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New modules

GIRO regularly introduces new modules or features to its software suite, such as:

• Analytics (2014)

A Business Intelligence reporting and analysis module which provides the means to transform large volumes of data into comprehensible information sets.

- CheckerAssistant (2014)
 A new Android[™] tablet-based application that interfaces wirelessly with the *Rider* module to collect ridership data.
- YardAssistant (2013)

An Android tablet mobile application used by depot staff in conjunction with the **DailyVehicle** module to manage vehicle locations and assignments as vehicles move around the depot or yard.

• *PlanBus* (2012)

A module that optimizes vehicle assignments to blocks on a daily basis by taking into account maintenance, depot, and fleet constraints.

More than 300 sites world-wide use *HASTUS* to optimize and better manage their transit operations, including: Brussels (STIB), Chicago (CTA), Geneva (TPG), Montréal (STM), New York (NYCT), Sydney (STA), Toulouse (Tisséo), and Vienna (Wiener Linien). GIRO hosts yearly *HASTUS* User Groups conferences, featuring technical sessions, workshops, round tables, and more!



About GIRO – Established in 1979, GIRO Inc. is a leading provider of software solutions for planning and managing transport-related operations. GIRO is a privately-owned company based in Montréal (Québec) Canada and employs 300 people. We continuously apply our industry-specific knowledge to introduce new software features and modules that incorporate the latest advances in optimization techniques, technology, and industry best practice so that our *HASTUS™*, *HASTUS-Rail™*, *GIRO/ACCES™*, and *GeoRoute™* products bring tangible benefits to our clients worldwide.

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