**Meeting Date:** 11/17/2022

From: Michael Dulude, Senior Technical Transit Operations Planner

## RECOMMENDED ACTION

Approve the purchase of the CrewOpt Module for RTC's HASTUS transit planning and scheduling application for an amount not to exceed $122,455.

## BACKGROUND AND DISCUSSION

RTC Public Transportation uses a transit planning and scheduling application known as HASTUS, a product offered by Giro, a Canadian based company. The RTC has used this application since 2002 for routinely planning and scheduling the public transit services provided. Due to the nature of this application, it is a sole source procurement.

The CrewOpt module for HASTUS provides an automated process for creating the necessary work pieces (run-cutting) the bus operators will perform from the vehicle schedule that is created. This module will also provide a more efficient process for creating the crew schedules from those pieces and provide a more efficient and effective process improving the crew bid system currently in use.

## FISCAL IMPACT

This CrewOpt module is currently budgeted in the FY 2023 Public Transportation budget ($126,000).

## PREVIOUS BOARD ACTION

There has been no previous board action taken.

**PROPOSAL TO
REGIONAL TRANSPORTATION COMMISSION OF WASHOE
COUNTY (RTC)
FOR THE ADDITION OF CREWOPT AND CUSTOMIZATIONS TO
BID
OCTOBER 28, 2022**

GIRO

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# 1.    Introduction

GIRO Inc. is pleased to submit to the Regional Transportation Commission of Washoe County (RTC) the following proposal for the addition of the CrewOpt module to RTC's HASTUS 2022 installation and customizations to your Bid 2022 module.

This additional module is summarized as follows:

- **CrewOpt** automated runcutter to produce efficient operator workdays to cover vehicle schedules.

CrewOpt is seamlessly integrated with other HASTUS modules.

This proposal assumes that the CrewOpt module will be added to RTC's HASTUS version 2022 installation.

# 2.    Work and services

The work and services in this proposal pertain to the implementation of the standard CrewOpt module without site-specific customization. To assess the extent of services required, we considered the following elements:

- Project management: work required by the project manager to organize and supervise the project team and prepare status reports as required.

- Specifications defining precisely how the CrewOpt and Bid module will be configured.

- Configuration to initialize relevant variables and rules.

- Configuration will be done for one collective bargaining agreement.

- The following customizations will be added to RTC's existing Bid module:

  o   Holiday assignments

  o   Day off quota range(s)

  o   Bid validations

  o   Creating the weekly packet

  o   AM and PM Pull Out sheet

  o   Location sign-in sheet

  o   Bid employee choice report

  o   Full-time operator interface

- If additional customizations are required, they will be at an additional cost.

- Testing prior to delivery where configured features are tested using a representative set of RTC data.

- Training sessions where your staff will be taught the functionalities and features of the CrewOpt module. The proposed training applies to a group of up to 8 people maximum and will use a hands-on, train-the-trainer approach. This proposal also includes training preparation time.

- Implementation support: time GIRO staff will devote to answering questions regarding functionalities and showing your team how to use CrewOpt effectively in your context.

# 3.    Project planning

Work would start in Montréal approximately 6 to 8 weeks after receiving your formal approval with the signed amended HASTUS license. It is estimated that approximately 3 to 6 months will be required to complete the CrewOpt addition project after formal approval is received and assuming staff availability on both sides.

It is estimated that approximately 2 to 4 months will be required to complete the Bid customizations after formal approval is received and assuming staff availability on both sides.

# 4.    License adjustment

The CrewOpt module is subject to a software license fee. The license fee calculation is based on the number of peak vehicles. License costs quoted in this proposal apply to a peak vehicle entitlement of 70, as defined in the RTC's HASTUS license. The applicable license fees are outlined in the table below.

The maximum number of HASTUS users or concurrent sessions has no impact on HASTUS license fees. Note that there are no licensing fees levied by GIRO for sharing data between the HASTUS application or database and external systems or applications (CAD/AVL, Google Transit® GTFS, etc.). In the event RTC pursues the GIRO Cloud Hosting Services, additional charges may occur to accommodate more users.

# 5.    Maintenance and support

The Maintenance and Support Contract cost will be revised at the end of the warranty period to reflect the updated HASTUS installation.

The estimated yearly cost of maintenance and support attributable to the CrewOpt module for 2022 is shown in the table below.

The exact cost will be calculated when the end date of the 3-month warranty period is known. CrewOpt maintenance and support will start at the end of the warranty period. The annual maintenance and support costs include software-version upgrades performed at no additional licensing costs.

# 6. Cost summary

## 6.1 Adding CrewOpt module

The costs outlined below include license, expenses, and associated services to bring the CrewOpt module into production at RTC.

| DESCRIPTION | CREWOPT |
| --- | --- |
| License (70 peak vehicles) | $ 55,200 |
| Services and expenses | $ 67,255 |
| **Total** | **$ 122,455** |
| **Annual support and maintenance (Year 2023)** | **$ 20,960** |

*Table 1 - Cost for CrewOpt addition (year 2022).*

Pricing includes a three-month warranty on CrewOpt. Expenses include airfare, transportation, hotel, meals, and incidentals for the training visit.

## 6.2 Bid customizations

The costs outlined below are for customizing RTC's current Bid 2022 module. RTC has elected to use their maintenance bank days for the Bid customizations.

| DESCRIPTION | COSTS | DAYS |
| --- | --- | --- |
| Services and expenses | $ 32,770 | 19 days |

*Table 2 - Cost for Bid 2022 customizations at RTC.*

# 7.    Conditions

1.  This is a fixed-cost proposal in US dollars. All prices quoted herein are exclusive of any taxes that may apply. Calculating and remitting any applicable taxes would be the responsibility of RTC.
2.  Costs are based on 2023 pricing and are valid until January 27, 2023.
3.  Your current HASTUS license would be amended to reflect the CrewOpt module addition. It is assumed that the number of peak vehicles would not exceed 70 as currently authorized by your license. If you wish to proceed with an increase in the number of peak vehicles, please contact GIRO.
4.  A single acceptance milestone is planned for CrewOpt. Unless stipulated otherwise in the contract, acceptance is reached when RTC provides acceptance confirmation or no later than fourteen (14) days following work completion and configured software delivery, whichever occurs first. In addition, the software is deemed accepted once used in an operational or "production" context.
5.  Any required hardware or system-software upgrades, such as Windows® and Oracle®/Microsoft SQL Server® is not included.  Please refer to the attached document for the recommended system requirements for HASTUS 2022 software based on your installation. The intended hardware configuration will be reviewed as part of the project and must be validated by GIRO.
6.  Travel expenses, for one person, are estimated at $1,150 per trip and $300 per day.
    GIRO reserves the right to review expense fees considering changing market conditions. GIRO shall provide justification to RTC for any such price adjustment.
7.  As of October 27, 2022, RTC has 27 days available in your bank of maintenance days. They can be used to pay in whole or in part for the service days required for the addition of module(s).
8.  The proposed payment milestones for the module addition are outlined below.

| ITEM | PAYMENT PERCENTAGE |
|---|---|
| Contract signature | 100% of the license fees |
| Delivery of base CrewOpt software | 30% total of services and expenses |
| Delivery of customized Bid module | 30% total of services and expenses |
| Completion of training | 30% total of services and expenses |
| Module acceptance | 10% total of services and expenses |

*Table 3 - Proposed payment milestones – CrewOpt module addition and customizations to Bid.*

9.  RTC will use HASTUS standard reports and interfaces.
10. No technical training on user-defined report creation and interface creation is included.
11. If Private Operators have access to HASTUS, RTC will be responsible to manage the Private Operator's security access in HASTUS. RTC will remain the sole point of contact with GIRO.