



STAFF REPORT/RESOLUTION

TO: Southwest Washington Regional Transportation Council Board of Directors
FROM: Matt Ransom, Executive Director 
DATE: August 25, 2015
SUBJECT: Professional Services Contract, RSG, Resolution 09-15-14

AT A GLANCE - ACTION

The RTC Board is being asked to approve Resolution 09-15-14 to enter into a contract for professional services with Resource Systems Group Inc. (RSG) to provide training to regional modeling staff in the operation and application of new activity based regional travel model, jointly developed by RTC and Metro.

INTRODUCTION

As the Metropolitan Planning Organization (MPO) for Clark County, RTC is responsible for the development and application of regional travel forecasting tools used in the development of transportation plans and projects. To aid coordinated transportation planning in the bi-state metropolitan area, RTC and Metro jointly develop regional travel forecasting tools and processes to support each MPO's transportation planning activities.

Over the past 20+ years, RTC and Metro have incrementally developed and improved the region's 4-step trip-based travel forecasting model. That model estimates for the region (1) the number of trips generated; (2) the origin and destination of each trip; (3) the mode of travel for each trip; and (4) finally, the route taken for each trip. While this 4-step modeling process has been the standard for the past few decades, with the advancements in computing power, metropolitan areas have been adopting a new approach to travel forecasting that simulates the travel behavior of individuals rather than estimating the aggregate behavior of households.

THE DASH MODEL

RTC and Metro modeling staff have been working with Resource Systems Group Inc. (RSG) to develop the Dynamic Activity Simulator for Households (DASH), the region's next generation, activity-based travel forecasting model. The model will be used to estimate the travel response of individuals to policies and infrastructure investments.

DASH TRAINING SCOPE OF WORK

The DASH model represents a significant evolution in travel forecasting for the region. Training from RSG will provide the modeling staff of RTC and Metro with an understanding of how the new modeling system works and operations of individual model components. The training will be provided as a six-session webinar series, which will allow participants the opportunity to experiment with model components as the training progresses. Webinar recordings will be used

for review and to train new staff. The scope of work is attached and includes the following major tasks.

- Develop Train Slides/Media and Materials
- Create Compendium of Model Variables
- Deliver Live Webinars
- Record Webinars

The training will take place before the end of 2015.

POLICY IMPLICATION

Adoption of this resolution is consistent with RTC's role and responsibilities in the development and application of regional travel forecasting tools. Adoption of the resolution also provides support for the implementation of the DASH model for the Clark County region and important coordination with RTC's regional partners in the application of this new modeling tool.

BUDGET IMPLICATION

The proposed professional services contract was a planned activity in support of the YR 2015 Work Program and Budget. The 2015 RTC Budget was adopted with \$15,000 designated for Professional Modelling Services.

ACTION REQUESTED

Adoption of Resolution 09-15-14 authorizing the Executive Director to enter into a professional services contract with Resource Systems Group Inc. (RSG) for the amount of \$14,967.00.

ADOPTED this _____ day of _____ 2015,
by the Southwest Washington Regional Transportation Council.

SOUTHWEST WASHINGTON
REGIONAL TRANSPORTATION COUNCIL

ATTEST:

Melissa Smith
Chair of the Board

Matt Ransom
RTC Executive Director

Attachment

MEMO

TO: Mark Harrington, SWRTC
FROM: John Giebe, RSG
CC: Dick Walker, Metro
DATE: August 24, 2015
SUBJECT: Work Task Order for Activity-Based Travel Model Training

Work Task Title: DASH Activity-Based Travel Model Training

Task Order Authorized Amount: \$14,967 – not to exceed

Purpose

The purpose of this work order is training in the use of “DASH,” the activity-based travel demand modeling system now under development for the Portland metropolitan region, which includes the regional modeling area for the Southwest Washington Regional Transportation Council (SWRTC).

Objective

The objective of the training program is to provide modelers at SWRTC, as well as agency partners from Metro, with a basic understanding of how DASH works as a system and each of its individual components. At the end of this training, participants should understand DASH’s model structures, inputs and outputs, and system-level behavior. Participants should come away with an understanding that would enable them to run the model, create scenarios, and analyze outputs.

Format

The format of the training is a webinar series. There will be six (6) webinars, of roughly 2 hours in length, covering various aspects of the model. The following subjects comprise the six webinars:

1. DASH System Overview
2. Population Synthesis & Long-Term Choice Models
3. Day-Level Choice Models
4. Dynamic Choice Models
5. Scenario Creation and Outputs
6. Working with Application Code.

Work Tasks to be Performed

The following tasks and sub-tasks comprise the work covered under this task order. Cost estimates for each main task appear in parentheses. Deliverables follow each sub-task.

1. **Develop Training Slides/Media** – For each of the six webinars, develop a set of PowerPoint slides describing the subject under study.

Deliverables: The PowerPoint slides will be made available to participants in PDF format, approximately two days in advance of each live webinar.

2. **Create Compendium of Model Variables** – For each estimated model, create a data dictionary for model variables and parameters values. The data dictionary will be current up to the date of the webinar, but may be updated subsequent to the webinar series through calibration, validation and sensitivity testing exercises.

Deliverables: The compendium will be made available to participants approximately two days before each live webinar.

3. **Deliver Live Webinars** – Present the material for each of the six webinars.

Deliverables: The six webinars will be delivered live, at times and dates to be determined.

4. **Record Webinar** – Record each live webinar presentation.

Deliverables: The recordings will be distributed to RTC and to Metro after the conclusion of the webinar series in digital file format, using GlobalMeet internet meeting software.

Budget

Task	Description	John Gliebe, Sr. Consultant		Katie Kobylenski, Coordinator		Totals	
		Hours	Cost	Hours	Cost	Hours	Cost
1	Develop Training Slides/Media (6 webinars)	60	\$ 11,214	4	\$ 271	64	\$ 11,485
2	Create Compendium of Model Variables	3	\$ 561	4	\$ 271	7	\$ 832
3	Deliver Live Webinars (6 webinars)	12	\$ 2,243		\$ -	12	\$ 2,243
4	Record Webinars (administration and distribution)		\$ -	6	\$ 407	6	\$ 407
Totals		75	\$ 14,017	14	\$ 950	89	\$ 14,967

Schedule

Subject to SWRTC, Metro and consultant staff agreement, the six webinars will be delivered over the span of three weeks, two webinars per week. Tentatively, the month of October has been identified as the most likely timeframe, based on participant availability. Final recorded webinars will be delivered to SWRTC and Metro within two weeks following the live delivery of the sixth webinar. This Task Order will expire on December 31, 2015.

