

## **TRANSIMS Version 4.0**

### ***February 2008 Release***

Change Log edited: 1/30/2008

#### **SysLib**

Skim\_File class was modified to set the default for the Total Time flag to false so PlanSum operates correctly when the SKIM\_TOTAL\_TIME key is undefined.

Subzone File and Data classes were added.

MAX\_WARNING\_MESSAGES and MAX\_WARNING\_EXIT\_FLAG keys were added to the Execution\_Service, Report\_Service, and Message\_Service interfaces. Default behavior will terminate the execution after 100,000 warning messages.

CONICAL and EXPONENTIAL volume-delay functions were added.

Level 4 warning messages from the Visual C++ compiler were addressed.

Warning messages generated by the network service methods were converted to the Warning method.

#### **ActGen 4.0.15**

The LOCATION\_CHOICE\_DETAILS\_\* report was expanded to dump distances and travel times between activity locations and the activity scheduling data for the selected households. The travel time estimates were modified to only include the additional time value when the activity schedule has adequate slack. The scheduling logic was modified to include additional time checks to avoid overlapping the start and end times of neighboring activities as a consequence of repairing duration errors. The location choice process was modified to avoid relocating common anchor activity locations between household persons or tours. The person matching algorithm was modified to give priority to un-used household members before it considers re-using a person that matches additional attributes. An error message was removed for situations where the vehicle file includes vehicles for households that are not in the household file. TRAVEL\_TIME\_FIELD\_MODE\_x key was added to enable the specification of a skim field for use in the travel time calculations for each mode.

#### **ConvertTrips 4.0.13**

Warning message logic was added to continue processing trip tables that include higher zone numbers than the TRANSIMS network.

#### **TripSum 4.0.4**

The column sums and percents for the Trip Time report were corrected.

### **PlanSum 4.0.34**

The Skim File processing was corrected when SKIM\_TOTAL\_TIME is not defined for non-Version3 output formats. The column sums and percents for the Trip Time report were corrected. For situations where a transit route utilizes a stop multiple times and the path boards at one of these stops, the transit schedule logic was modified to select the last boarding time prior to the alighting stop. Conical and exponential volume-delay functions were added.

### **AdjustPlans 4.0.8**

A conflict between the new help system and the NEW\_VEHICLE\_FILE key was fixed.

### **LocationData 4.0.1**

Processing data files is now optional, but a warning message is sent.

CREATE\_NOTES\_AND\_NAME\_FIELDS no longer adds two NOTES fields to the new activity location file. COPY\_EXISTING\_FIELDS key was added to automatically copy all of the fields in the input activity location file to the output activity location file. Error messages are generated when a duplicate field name is added. The NEW\_WALK\_ACCESS\_FIELD and MAX\_WALK\_DISTANCE keys were added to create location weights based on the level of transit service within walking distance. Link, Node, Transit Stop, Transit Route, and Transit Schedule files are read when the walk access field is specified. If the conversion script returns zero, the activity location record is not written to the output file. NEW\_SUBZONE\_FIELD\_x, MAX\_SUBZONE\_DISTANCE\_x, SUBZONE\_DATA\_FILE\_x, SUBZONE\_DATA\_FORMAT\_x and SUBZONE\_DATA\_FIELD\_x keys were added to create location weights based on the subzone activity in the proximity to each activity location within a zone.

### **ArcNet 4.0.12**

SUBZONE\_DATA\_FILE key was added to convert subzone data files to arcview shape files.

### **PlanSelect 4.0.19**

A bug was fixed in setting the flags for SELECT\_OD\_COORDINATES and EXCLUDE\_OD\_COORDINATES

### **Router 4.0.28**

Conical and exponential volume-delay functions were added.

### **ProblemSelect 4.0.3**

The input household list file was made optional. TIME\_OF\_DAY\_FORMAT was added to specify the time format in the input problem file.

### **Microsimulator 4.0.38**

Transit network coding errors were changed from error messages to warning messages in order to dump all of the problems and then terminate the program with a transit coding error message.

## **Documentation**

User guides were updated for PopSyn, ActGen, Router, Microsimulator, TransimsNet, ConverTrips, and ArcNet.

Quick reference documents were updated for PopSyn, Router, Microsimulator, PlanSum, PlanSelect, PlanCombine, PlanPrep, PlanTrips, LinkDelay, LinkSum, ProblemSelect, Validate, IntControl, SubareaNet, ArcNet, ArcPlan, and ArcSnapshot.