

## **TRANSIMS Version 4.0**

### ***October 1, 2007 Release***

Change Log edited: 9/24/2007

#### **SysLib**

The Link\_Direction\_File class was modified to include difference fields and calculations.\

An Occupancy\_File class was added to the support library.

#### **Microsimulator 4.0.34**

Cell occupancy output class was added. The keys include OUTPUT\_OCCUPANCY\_FILE\_\*, \_FORMAT\_\*, \_TIME\_FORMAT\_\*, \_TIME\_INCREMENT\_\*, \_TIME\_RANGE\_\*, \_LINK\_RANGE\_\*, \_MAX\_FLAG\_\*, and \_COORDINATES\_\*. Additional pointer validation checks were added. The DRIVER\_REACTION\_TIME, PERMISSION\_PROBABILITY SLOW\_DOWN\_PROBABILITY, and SLOW\_DOWN\_PERCENTAGE keys were expanded to permit different values by facility type.

#### **ArcSnapshot 4.0.6**

The input file can now be an OCCUPANCY\_FILE or a SNAPSHOT\_FILE. If both keys are provided, the snapshot file will be processed. The TIME\_PROCESSING\_METHOD key was added to enable the program to aggregate multiple time periods from the input file. The options include AT\_INCREMENT, TOTAL, and MAXIMUM. AT\_INCREMENT is the default and specifies no aggregation. TOTAL sums cell occupancies and MAXIMUM keeps the increment with the greatest number of occupied cells.

#### **ArcDelay 4.0.11**

The option for processing Link Direction Files was added through keys LINK\_DIRECTION\_FILE and ARCVIEW\_LINK\_DIR\_FILE. The ADD\_LINK\_DIRECTION\_INDEX key will add the link direction index to the output Arcview file. ARCVIEW\_INTERSECTION\_FILE was added to summarize link delay files by intersection node. Bandwidth processing for Link Direction or Link Delay files was added through BANDWIDTH\_FIELD, BANDWIDTH\_SCALING\_FACTOR, MINIMUM\_BANDWIDTH\_VALUE, MINIMUM\_BANDWIDTH\_SIZE, MAXIMUM\_BANDWIDTH\_SIZE, MAXIMUM\_SHAPE\_ANGLE, and MINIMUM\_SHAPE\_LENGTH keys.

#### **ArcPlan 4.0.13**

MINIMUM\_BANDWIDTH\_VALUE, MINIMUM\_BANDWIDTH\_SIZE and MAXIMUM\_BANDWIDTH\_SIZE keys were added to control the width range for bandwidth output.

#### **PlanPrep 4.0.8**

FIX\_PLAN\_FILE was added to enable the modeler to find and replace a sequence of node or link legs with a new sequence of nodes or links. The input file provides the leg sequences and

the percentage of occurrences that will be randomly selected for replacement. SUBAREA\_PLAN\_FILE and SUBAREA\_PLAN\_FORMAT were added to merge a subarea plan file back into the regional plan set.

#### **ActGen 4.0.10**

The distance output fields in the trip length and tour length summaries were fixed. The vehicle allocation logic was fixed for activity patterns that drive and walk legs.

#### **PlanSelect 4.0.18**

The option for multiple coordinate selection boxes was implemented. New keys include SELECT\_COORDINATES\_\*, SELECT\_OD\_COORDINATES\_\*, and EXCLUDE\_OD\_COORDINATES\_\*.

#### **LinkSum 4.0.18**

An initialization bug was fixed in the travel time group report. The Link Direction output with a previous link delay file includes the difference fields.

#### **ArcDiff 4.0.2**

The program was upgraded to generate difference fields for node-based delay files in addition to link-based delay files.

#### **PlanCompare 4.0.18**

A minor bug was fixed in the percent selection logic to address large scale selections with the same percent error.

#### **Documentation:**

Microsimulator user's guide and quick reference documents.