TRANSIMS Version 4.0

April 2009 Release

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SysLib

Time step and time ranges classes were expanded to include a pad flag for the time label and range label methods. If true, this option will generated time strings that contain a fixed number of characters.

Point Time data and file classes were added to store and manage files of data entering and exiting activity locations and zones.

IGNORE_PERIODS method was added to the link direction file class to disable the conversion of time ranges for fields starting with P#, B#, and D#.

The performance data structure and demand service reading process now include the option to summarize three additional fields: congested VMT, congestion VHT, and congestion percentage of the time period. A Congested_Ratio method was added to set the time ratio that defines congested conditions. These fields can also be selected for output in a link data or link direction file using the key words CONGESTED_VMT, CONGESTED_VHT, and CONGESTED_TIME.

OUTPUT_SUMMARY_PERSON_FLAG_* key was added to the link delay class to output performance statistics weighted by vehicle occupancy.

ArcShapshot 4.0.10

TIME_STEPS_PER_SECOND and PAD_FILE_TIME_LABEL keys were added to enable the program to create snapshot images at less than one second intervals (assuming the Microsimulator created the snapshot file at sub-second intervals). The padding flag ensures that the labels on the output shapefiles have a fixed string length.

VISSIMPlan 4.0.2

New program to convert TRANSIMS plan files to VISSIM XML route data. OUTPUT_TIME_INCREMENT key was added to create individual time periods with the overall time range to allocate the trips. Time period numbers and selection was corrected.

VISSIMNet 4.0.7

Shape file generation and processing was added for split links. SELECT_TIME_PERIOD key was added to specify a time range for the output network. The demand actuated signal enumeration was corrected. Lane connectivity was added to permit paths to cross the street between two parking stubs.

Relocate 4.0.11

A bug was fixed in converting the last link within link-based plan files. Logic was added to properly expand plan records that start and end on the same link. Additional logic was added to properly expand plan records that start and end at activity location on opposite sides of the street (i.e., cross the street). The printout file now reports the number of updates made to plan path records as well as origins and destinations.

Route 4.0.55

Logic was added to reset the vehicle location for each person within a household to avoid vehicle access problems caused by another driver not returning the vehicle home at the end of the day.

PlanCompare 4.0.28

A bug was fixed in the path-only comparison process. The path comparison process was changed to more accurately account for small differences in both the input and compare plans rather than just the compare plan. The permitted range for maximum percent selected was changed to 0.1 to 100.0. SELECT_TIME_PERIODS key was added to limit the compare of differences to specified times of day. A correction was added to continue selecting records from the input plan file after the compare plan end-of-file is reached.

LinkSum 4.0.26

The performance measure calculations for the previous link delay file were made identical to the delay processing calculations within demand service. Logic was added to enable the reports and output files to summarize data for a specific link direction using a link group file. CONGESTED_TIME_RATIO key was added to activate the congestion performance measures for the detailed performance report and the output link data or link direction files. If the time period data has a travel time ratio greater than the specified value (default is 3.0), the VMT, VHT, and time period is added to corresponding congestion performance measure. The new link data and link direction field names that output this data are CONGESTED_VMT, CONGESTED_VHT, and CONGESTED_TIME. The time values are output as a percentage of the total time period. A bug was fixed in the percent time calculations for the detail network performance report.

ArcNet 4.0.21

SELECT_TIME_PERIOD key was added to define a time range for selecting time-based network attributes for signals, lane-use, parking, tolls, turns, and transit routes.

SubareaNet 4.0.10

The highest zone number in the activity location file is rounded up by 10 and used as the initial zone number assigned to the activity locations added to each subarea boundary link.

SubareaPlans 4.0.31

The highest zone number in the activity location file is rounded up by 10 and used as the initial zone number assigned to the activity locations added to each subarea boundary link.

ProblemSum 4.0.4

NEW_PROBLEM_TIME_FILE, NEW_PROBLEM_TIME_FORMAT, NEW_PROBLEM_LINK_FILE, and NEW_PROBLEM_LINK_FORMAT keys were added to create files summarizing different problem types by time of day and link by time of day.

PlanSum 4.0.47

Logic was added to correctly process skims and trip tables for plan files that do not start and end at activity locations. The process link file is read to create a map between parking lots (and transit stops) and connected activity locations to retrieve a zone number for the parking lot.

PlanTrips 4.0.10

HOUSEHOLD_LIST key was added to limit the time adjustment process to a select list of households. Data gathering for the time shift summary report was added for applications were an input trip or activity file is not provided.

TripSum 4.0.15

NEW_LOCATION_TRIP_END_FILE, NEW_LOCATION_TRIP_END_FORMAT, NEW_ZONE_TRIP_END_FILE, and NEW_ZONE_TRIP_END_FORMAT keys were added to summarize trip origins and destinations by activity location and zone number.

Microsimulator 4.0.58

FIX_VEHICLE_LOCATIONS key was added to move the vehicle to the origin parking lot if it is not already at that location. Vehicle passenger counts were added to each record in the snapshot file. The option to output link summary statistics weighted by vehicle occupancy was added (OUTPUT_SUMMARY_PERSON_FLAG_*). The vehicle occupancy weighting option was added to the cycle failure statistics.

ArcDelay 4.0.17

A bug was fixed checking for time period values in field names that start with "D". IGNORE_TIME_RANGE_FIELDS key was added to disable the processing of time ranges for link direction file fields starting with P#, B#, or D#.

FileFormat 4.0.2

NESTED_COUNT_FIELD and NESTED_COUNT_FIELD_* keys were added to enable the format conversion to recognize and process nested data files.

TransimsNet 4.0.21

Additional protection against deleting nodes in the keep node list was included.

Progression 4.0.5

EVALUATE_EXISTING_OFFSETS key was added to generated progression performance measures for the input signal offsets prior to recalculating the offsets for output.

TPPlusRoute 4.0.3

The ONEWAY route field was modified to recognize "T" and "t" as well as "Y" and "y".