ConvertTrips Quick Reference

Version 4.0.19

Revision History
1/8/2010 Edited by AECOM Consult, Inc.
4/15/2010 Edited by RSG, Inc.

Syntax:

ConvertTrips [-flag] [control_file]

Purpose:

1. Convert multiple zone-to-zone trip tables to trip, vehicle, household, and population files
2. Assign each trip table to a different trip purpose and vehicle type
3. Apply different diurnal distribution curves to each trip table or zone range.
4. Apply district-to-district correction factors to the input trips by trip purpose.
5. Append additional trips to existing trip, vehicle, household, and population files.
6. A period field can be included in the input trip tables to limit the time-of-day distribution of the trips.

Required Keys

NET_ACTIVITY_LOCATION_TABLE	[net_directory]*filename*
NET_PROCESS_LINK_TABLE	[net_directory]*filename*
NEW_TRIP_FILE	[project_directory]*filename*
NEW_HOUSEHOLD_FILE	[project_directory]*filename*
NEW_POPULATION_FILE	[project_directory]*filename*
NEW_VEHICLE_FILE	[project_directory]*filename*
TRIP_TABLE_FILE_# (1)	[project_directory]*filename*
TRIP_TIME_FILE_#	[project_directory]*filename*

Optional Keys

TITLE	Text
REPORT_FILE	*Filename*
REPORT_FLAG	FALSE {true/false/yes/no/1/0}
MAX_WARNING_MESSAGES	100,000
MAX_WARNING_EXIT_FLAG	TRUE {true/false/yes/no/1/0}
PROJECT_DIRECTORY	*Pathname*
DEFAULT_FILE_FORMAT	VERSION3 {(2)}
STARTING_HOUSEHOLD_ID	1 {>=1}
STARTING_VEHICLE_ID	1 {>=1}
TIME_OF_DAY_FORMAT	24_HOUR_CLOCK {(3)}

ADDITIONAL_TRAVEL_TIME (4)	600 seconds (>= 0)
RANDOM_NUMBER_SEED	0 {>= 0}
ZONE_EQUIVALANCE_FILE (5)	[project_directory]*filename*
TRAVEL_TIME_FILE (4)	[project_directory]*filename*
TRIP_TABLE_FORMAT_#	[default_file_format] {(2)}
TRIP_SCALING_FACTOR_#	1.0 {0.001..100.0}
TRIP_TIME_FORMAT_#	[default_file_format] {(2)}
TRIP_TIME_SCRIPT_# (4)	[project_directory]*filename* (4)
TRIP_TIME_FIELD_# (4)	*field_name*
TIME_PERIOD_RANGE_#	All (6)
TIME_CONTROL_POINT_#	ORIGIN {ORIGIN, DESTINATION, MID-TRIP}
RETURN_TRIP_OFFSET_# (7)	0 time duration
ORIGIN_WEIGHT_FIELD_#	*field_name*
DESTINATION_WEIGHT_FIELD_#	*field_name*
DISTANCE_WEIGHT_FLAG_#	TRUE {true/false/yes/no/1/0} (10)
TRIP_PURPOSE_CODE_#	1 {0..100}
TRANSIT_MODE_CODE_#	2 {0..14} (8)
AVERAGE_TRAVEL_SPEED_# (4)	10 {1..50}
VEHICLE_TYPE_#	1 {1..20}
VEHICLE_SUBTYPE_#	0 {0..20}
TRIP_ADJUSTMENT_FACTORS_# (5)	[project_directory]*filename*
TRIP_ADJUSTMENT_FORMAT_#	[default_file_format] {(2)}
TIME_PERIOD_EQUIVALENCE_#	[project_directory]*filename*
TRIP_FILE (9)	[project_directory]*filename*
HOUSEHOLD_FILE (9)	[project_directory]*filename*
POPULATION_FILE (9)	[project_directory]*filename*
VEHICLE_FILE (9)	[project_directory]*filename*
NET_DIRECTORY	*Pathname*
NET_ZONE_TABLE	[net_directory]*filename*
NET_LINK_TABLE	[net_directory]*filename*
NET_DEFAULT_FORMAT	[default_file_format] {(2)}
NET_ZONE_FORMAT	[net_default_format] {(2)}
NET_LINK_FORMAT	[net_default_format] {(2)}
NET_ACTIVITY_LOCATION_FORMAT	[net_default_format] {(2)}
NET_PROCESS_LINK_FORMAT	[net_default_format] {(2)}
NEW_DEFAULT_FORMAT	[default_file_format] {(2)}
NEW_TRIP_FORMAT	[default_file_format] {(2)}
NEW_HOUSEHOLD_FORMAT	[new_default_format] {(2)}
NEW_POPULATION_FORMAT	[new_default_format] {(2)}

NEW_VEHICLE_FORMAT	[new_default_format] {(2)}
TRIP_FORMAT	[default_file_format] {(2)}
HOUSEHOLD_FORMAT	[default_file_format] {(2)}
POPULATION_FORMAT	[default_file_format] {(2)}
VEHICLE_FORMAT	[default_file_format] {(2)}

Reports

CONVERTTRIPS_REPORT_#	TRIP_TIME_SCRIPT
	TRIP_TIME_STACK
	PRINT_ZONE_EQUIVALENCIES
	TIME_PERIOD_EQUIVALENCE

Notes

1	Each trip table group is comprised of up to 20 keys.
2	{VERSION3, BINARY, FIXED_COLUMN, COMMA_DELIMITED, SPACE_DELIMITED, TAB_DELIMITED, CSV_DELIMITED, DBASE, LANL, SQLITE3}
3	{HOURS, SECONDS, 24_HOUR_CLOCK, 12_HOUR_CLOCK}
4	The trip travel time is estimated in one of three ways. If a trip time file is provided, a travel time script may be provided for one or more trip groups to permit the modeler to calculate the travel time based on fields in the travel time file. If a script is not provided, a travel time field name can be specified to extract the travel time directly from the travel time file. If the travel time file is not provided, the time will be estimated based on the right-angle distance between the activity locations, the average travel time for the group, and the additional travel time value.
5	The trip adjustment factor is applied by zone of zone group if a zone equivalence file is provided.
6	Time Range (e.g., 0:00..6:00, 18:00..23:00)
7	Return trip durations are used to convert trips in production-attraction format to trips in origin-destination format by offsetting the return trip by a specified time duration. This is primarily used for park-&-ride and kiss-&-ride trips where the vehicle location for the return trip is dependent on the location selected for the outbound trip.
8	1 = walk, 2 = drive, 3 = transit, 4 = rail transit, 5 = park-&-ride outbound, 6 = park-&-ride inbound, 7 = bicycle, 8 = magic move, 9 = school bus, 10 = HOV2, 11 = HOV3, 12 = HOV4, 13 = kiss-&-ride outbound, 14 = kiss-&-ride inbound
9	If input trip, household, population, and vehicle files are provided, the program appends the new trips to the end of the existing files. The household and vehicle IDs are automatically calculated based on the highest values in the existing files.
10	If turned on, the destination activity locations are located with consideration to the distance between the origin and each activity location in the destination zone.