

# TripSum Quick Reference

Version 4.0.19

## Revision History

1/8/2010 Edited by AECOM Consult, Inc.

4/15/2010 Edited by RSG, Inc.

Syntax:

***TripSum [-flag] [control\_file] [partition]***

Purpose:

1. Summarize trip or activity file records for reports.
2. Select trip or activity file records for output to a new file.
3. Select and/or summarize by mode, trip purpose, origin or destination zone or polygon.
4. Randomly select a subset of trips or activity by origin, destination and time period.
5. Generate trip time and distance distributions by mode and trip purpose.
6. Produce zone or district trip tables by mode and time of day.
7. Summarize trip ends by link, location, and/or zone.
8. Generate demand/capacity ratio reports by link and time of day.
9. Create diurnal distributions of the start, end, and mid-trip times.
10. Expand travel statistics from survey activities to the total population.

## Required Keys

TRIP_FILE (1)	[project_directory]filename
ACTIVITY_FILE (1)	[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 {(4)}
TRAVELER_SCALING_FACTOR	100 {2..100}
NET_DIRECTORY	Pathname
NET_NODE_TABLE	[net_directory]filename
NET_LINK_TABLE	[net_directory]filename
NET_ACTIVITY_LOCATION_TABLE	[net_directory]filename
NET_LANE_USE_TABLE	[net_directory]filename
NET_PROCESS_LINK_TABLE	[net_directory]filename

VEHICLE_FILE (2)	[project_directory]/filename
NEW_TRIP_FILE (2)	[project_directory]/filename
NEW_ACTIVITY_FILE (2)	[project_directory]/filename
NEW_VEHICLE_FILE (2)	[project_directory]/filename
HOUSEHOLD_LIST	[project_directory]/filename[.partition]
HOUSEHOLD_PERSON_COUNT (7)	[project_directory]/filename[.partition]
TIME_OF_DAY_FORMAT	SECONDS {(3)}
SUMMARY_TIME_PERIODS	All (4)
SUMMARY_TIME_INCREMENT	15 minutes {0..240}
SUMMARY_LENGTH_INCREMENT	500 meters {10..2000}
SELECT_TRIP_MODES	All (5)
SELECT_TRIP_PURPOSES	All (5)
SELECT_ORIGIN_ZONES	All (5)
SELECT_DESTINATION_ZONES	All (5)
SELECT_ORIGIN_POLYGON	[project_directory]/filename.shp
SELECT_DESTINATION_POLYGON	[project_directory]/filename.shp
SELECT_PROBABILITY_FILE	[project_directory]/filename
TIME_PERIOD_EQUIVALENCE	[project_directory]/filename
RANDOM_NUMBER_SEED	Computer clock time {>=0}
CREATE_INDEPENDENT_TRIPS	FALSE {true/false/yes/no/1/0} (8)
STARTING_HOUSEHOLD_ID	1 {>=1}
STARTING_VEHICLE_ID	1 {>=1}
NEW_HOUSEHOLD_LIST	[project_directory]/filename[.partition]
NEW_LINK_TRIP_END_FILE	[project_directory]/filename
NEW_TIME_DISTRIBUTION	[project_directory]/filename
NEW_TRIP_TABLE_FILE	[project_directory]/filename
NEW_TRIP_TIME_FILE	[project_directory]/filename
ZONE_EQUIVALENCE_FILE (6)	[project_directory]/filename
NEW_TRIP_DISTANCE_FILE	[project_directory]/filename
DISTANCE_CALCULATION	STRAIGHT_LINE {(7)}
NEW_LOCATION_TRIP_END_FILE	[project_directory]/filename
NEW_ZONE_TRIP_END_FILE	[project_directory]/filename
NET_DEFAULT_FORMAT	[default_file_format] {(4)}
NET_NODE_FORMAT	[net_default_format] {(4)}
NET_LINK_FORMAT	[net_default_format] {(4)}
NET_ACTIVITY_LOCATION_FORMAT	[net_default_format] {(4)}
NET_LANE_USE_FORMAT	[net_default_format] {(4)}
NEW_LINK_TRIP_END_FORMAT	[default_file_format] {(4)}
NEW_LOCATION_TRIP_END_FORMAT	[default_file_format] {(4)}
NEW_ZONE_TRIP_END_FORMAT	[default_file_format] {(4)}

NEW_TRIP_TABLE_FORMAT	[default_file_format] {(4)}
SELECT_PROBABILITY_FORMAT	[default_file_format] {(4)}

## Reports

TRIPSUM_REPORT_#	TOP_100_LINK_TRIP_ENDS
	TOP_100_LANE_TRIP_ENDS
	TOP_100_TRIP/CAPACITY_RATIOS
	PRINT_ZONE_EQUIVALENCIES
	TRIP_TIME_REPORT
	TRIP_LENGTH_SUMMARY
	TRIP_PURPOSE_SUMMARY
	MODE_LENGTH_SUMMARY
	MODE_PURPOSE_SUMMARY

## Notes

1	A trip or activity file is required, but not both.
2	If a new trip or activity file is created, an input vehicle and new vehicle files are required.
3	{HOURS, SECONDS, 24_HOUR_CLOCK, 12_HOUR_CLOCK}
4	Time Range (e.g., 0:00..6:00, 18:00..23:00)
5	ID Range (e.g., 1000, 2000, 3000..3100)
6	The zone equivalence file aggregates trips into summary districts.
7	{STRAIGHT_LINE, RIGHT_ANGLE, SIMPLE_AVERAGE, WEIGHTED_AVERAGE}
8	Enables the program to convert each trip encountered in an input Plan File to a separate household and vehicle. Input and output vehicle files must be specified.