TRANSIMS Version 5 Parameter Reference

AB_SPEED_FIELD_NAME

LinkData Control Keys (blank)

AB_VOLUME_FIELD_NAME

LinkData Control Keys (blank)

ACCESS_FORMAT

See File Formats.

ACTIVITY_DURATION_1

ConvertTrips Control Keys (blank)

ACTIVITY_DURATION_1	0.0 hours	//---- 0.0, 0.25..24.0 hours

ADD_PASSENGER_CIRCLE_SIZE

ArcSnapshot Control Keys Boolean

ADD_PASSENGER_SQUARE_SIZE

ArcSnapshot Control Keys Boolean

ADD_UTURN_TO_DEAD_END_LINKS

TransimsNet Control Keys Boolean

ADDITIONAL_TRAVEL_TIME

ConvertTrips Control Keys

This is an optional key with a default value of 0 minutes (range of 0 – 30 minutes). The **ConvertTrips** program estimates the travel time between the trip origin and destination using the user provided average speed by trip group and the straight line distance between the origin and destination activity locations. A constant value is added to this result to account for vehicle access, parking, and overall uncertainty in the travel time estimate. This key is used to define the additional travel time added to each trip.

ARCPLAN_REPORT_1

ArcPlan Control Keys (blank)

AREA_TYPE_INDEX_FIELD

NetPrep Control Keys (blank)

AVERAGE_TRAVEL_SPEED_1

ConvertTrips Control Keys

This is an optional key that is used to estimate the travel time between activity locations. The straight-line distance between the coordinates of the two points is divided by the average travel speed to estimate the travel time. The additional travel time value is added to the estimated travel time to calculate the trip duration. Default value for this key is 10 meters per second (about 22 mph). This calculation is used if a SKIM_FILE is not provided or the origin-destination cell in this matrix is zero.

BA_SPEED_FIELD_NAME

LinkData Control Keys (blank)

BA_VOLUME_FIELD_NAME

LinkData Control Keys (blank)

BANDWIDTH_SCALING_FACTOR

Draw Service Keys (blank)

BICYCLE_SPEED

The bicycle speed is optional and when provided specifies the bicycling speed in meters per second. The value can range from 1.0 to 10.0 meters per second. The default value is 4.0. Link lengths are divided by this value to convert distance into bicycle time.

BICYCLE_TIME_VALUES_1

The bicycle time value key is optional and when provided specifies the impedance values for time the traveler spends bicycling. The values can range from zero to 1000.0. The default value is 15.0 impedance units / second. This value is multiplied by the time spent bicycling on network links. If household types are defined, this key can include a list of values corresponding to each household type. For example, 15, 20, 25 can be specified to define the bicycle time value for household types 1, 2 and 3+, respectively

BUS_BIAS_CONSTANTS_1

The bus bias constant is optional. When provided, the total impedance value for each local or express bus segment of a transit trip is adjusted by this value. The value must be greater than zero and is applied after the bus bias factor is applied. If household types are defined, this key can include a list of impedance values corresponding to each household type. The default value is 0.

BUS_BIAS_FACTORS_1

The bus bias factors are optional and when provided factors up the total impedance value for each segment of a transit trip that uses a local or express bus. The value can range from 1.0 to 3.0. The default value is 1.0. If household types are defined, this key can include a list of factors corresponding to each household type.

CELL_SIZE

ArcSnapshot Control Keys	(blank)
Flow-Time Service Keys	(blank)

CENTER_ONEWAY_LINKS

Draw Service Keys	Boolean

CIRCULAR_GROUP_FLAG

Simulation Service Keys	Boolean

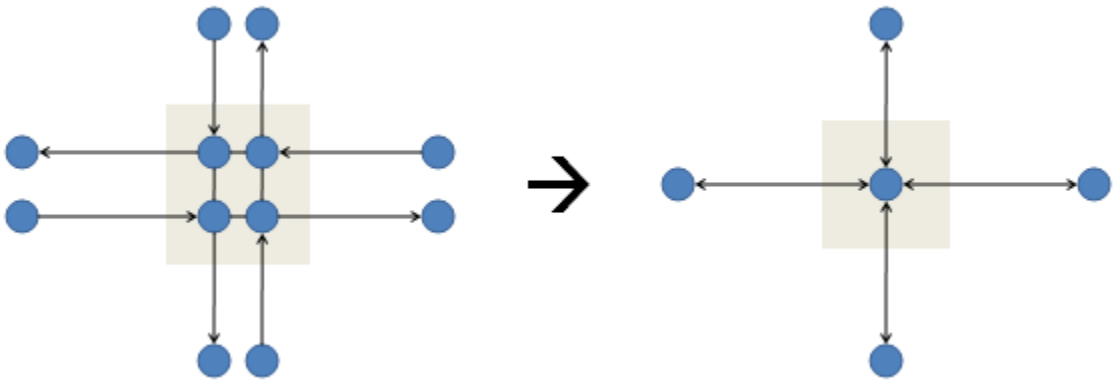
CLEAR_INPUT_FLOW_RATES

Flow-Time Service Keys Boolean

COLLAPSE_DIVIDED_ARTERIALS

NetPrep Control Keys Boolean

This key is optional and is disabled/FALSE by default. The purpose of this key is to allow the user to either (A) maintain divided arterials and multi-node signals at signalized intersections (if key is set to FALSE or omitted from the control file) or (B) collapse divided arterials in the raw GIS network data input to NetPrep (e.g., data obtained from an MPO often includes parallel links for divided arterials) and replace multi-node signalized intersections with single nodes. Using this key (set to TRUE) is not required and may even be undesirable in certain scenarios, but in general, it is recommended to collapse divided arterials. TRANSIMS Version 5 does support modeling of both divided and collapsed arterials. However, divided arterials and specifically multi-node signalized intersections are more complicated to code and simulate. Using single-node intersections will make the network easier to edit and simulate. The link file contains a DIVIDED field which is used to model link access such as parallel roadways. An illustration of the collapsing process at a multi-node intersection is shown below:



COLLAPSE_SHAPE_NODES

NetPrep Control Keys Boolean

The COLLAPSE_SHAPE_NODES parameter is optional. The default value is False. This was previously COLLAPSE_NODES_FLAG in TransimsNet V4.

COMPARE_GENERALIZED_COSTS

PlanCompare Control Keys Boolean

COMPARE_PERFORMANCE_FORMAT

See File Formats.

LinkSum Control Keys	FILE_FORMAT

COMPARE_PLAN_FORMAT

See File Formats.

PlanCompare Control Keys	FILE_FORMAT

CONGESTED_TIME_RATIO

Data Service Keys	(blank)

CONNECTION_FORMAT

See File Formats.

System File Keys	FILE_FORMAT

CONTOUR_DISTANCE_INCREMENTS

ArcPlan Control Keys	(blank)

CONTOUR_TIME_INCREMENTS

ArcPlan Control Keys	(blank)

CONVERTTRIPS_REPORT_1

ConvertTrips Control Keys	(blank)

COORDINATE_RESOLUTION

NetPrep Control Keys	(blank)

COPY_EXISTING_FIELDS

LocationData Control Keys	Boolean

COPY_LOCATION_FIELDS

LinkSum Control Keys	(blank)

COST_VALUES_1

The cost values key are optional and when provided specifies the impedance values for travel cost. The values can range from zero to 1000.0. The default value is 0.0 impedance units / cent. This value is multiplied by the cost value on Process Links, parking lots, and the transit fare. The program also looks for a "COST" field on the Link file. If household types are defined, this key can include a list of values corresponding to each household type. For example, 0, 5, 10 can be specified to define the cost value for household types 1, 2 and 3+, respectively.

COUNT_PROBLEM_WARNINGS

Flow-Time Service Keys Boolean

CURVED_CONNECTION_FLAG

Draw Service Keys Boolean

DAILY_WRAP_FLAG

TRUE/FALSE flag, defaults to FALSE.

DATA_FORMAT_1

See File Formats.

FileFormat Control Keys FILE_FORMAT
LocationData Control Keys FILE_FORMAT

DATA_JOIN_FIELD_1

LocationData Control Keys (blank)

DEBUG_LINK_LIST

Microsimulator Control Keys (blank)

DEBUG_TIME_RANGE

Microsimulator Control Keys (blank)

DEBUG_VEHICLE_LIST

Microsimulator Control Keys (blank)

DEFAULT_FILE_FORMAT

Execution Service Keys Text

This control key is optional and can be used to change the default file format. By default, TRANSIMS creates new files in TAB_DELIMITED format. Other options include BINARY, DBASE, COMMA_DELIMITED, SPACE_DELIMITED, FIXED_COLUMN and SQLITE3.

DEFAULT_LINK_SETBACK

TransimsNet Control Keys Decimal

This key is optional and has a default value of 7.5 meters.

DEFAULT_LOCATION_SETBACK

TransimsNet Control Keys (blank)

DEFAULT_PARKING_DURATION

This key is optional and has a default value of 0.0 hours.

DELETE_LINK_RANGE

NetPrep Control Keys List

The delete link range is optional and if specified defines a series of link numbers where the pocket lanes, activity locations (locations in V5), parking lots (parking in V5), process links (access links in V5) and link are deleted. The lane connectivity (connection in V5) at both ends of the link is also updated. The range is a comma separated list of link ranges. A link range is specified using two period (e.g., 1, 2, 4..10, 100..200, 300).

DELETE_NODE_RANGE

NetPrep Control Keys List

The delete node range is optional and if specified defines a series of node numbers where the lane connections, traffic control warrants, and the node are deleted. The range is a comma separated list of node ranges or a continuous node range. A continuous node range is specified using two periods (e.g., 1, 2, 4..10, 100..200, 300).

DESTINATION_LOCATIONS_PER_ZONE

PathSkim Control Keys (blank)

DESTINATION_WEIGHT_FIELD_1

ConvertTrips Control Keys (blank)

DETECTOR_FORMAT

System File Keys FILE_FORMAT

DIRECTIONAL_DATA_FORMAT

LinkData Control Keys (blank)

DISTANCE_VALUES_1

The distance value keys are optional and when provided specify the impedance values for the distance traveled in a driving trip. The values can range from zero to 1000.0. The default value is 0.0 impedance units / meter. This value is multiplied by the length of the each link. It is only used for driving trips. If household types are defined, this key can include a list of values corresponding to each household type. For example, 0, 5, 10 can be specified to define the distance value for household types 1, 2 and 3+, respectively.

DISTANCE_WEIGHT_FLAG_1

ConvertTrips Control Keys Boolean

DRAW_AB_DIRECTION

Draw Service Keys Boolean

DRAW_NETWORK_LANES

Draw Service Keys Boolean

DRAW_ONEWAY_ARROWS

Draw Service Keys Boolean

DRAW_VEHICLE_SHAPES

Draw Service Keys Boolean

DRIVER_REACTION_TIME_1

Flow-Time Service Keys (blank)

DROP_DEAD_END_LINKS

NetPrep Control Keys Integer

The drop dead end links key is optional. This key defaults to 0 meters when the value is not provided. This key specifies an integer value in ranging from 0 meters to 2000 meters. Dead end links that are shorter than the length specified are dropped from the output link file. Note that TransimsNet 5 also has an ADD_UTURN_TO_DEAD_END_LINKS key (TRUE, FALSE; DEFAULT = FALSE; Boolean).

DROP_SHORT_LINKS

NetPrep Control Keys Decimal

The drop short links key is optional. This key defaults to 37.5 meters when the value is not provided. This key specifies the minimum length of the network links. When the network link length is less than this value, the link is dropped. The value can range from 7.5 to 100 meters. Note that TRANSIMS requires a link to be at least as long as the longest vehicle that can use the link. Vehicle sizes are defined in the vehicle prototype file and are defined as multiples of TRANSIMS cells (7.5 meters).

END_TIME_CONSTRAINT

The end time constraint is optional and only applied if the IGNORE_TIME_CONSTRAINTS key is "false". This parameter enables the user to add a time buffer to the end time of the trip to limit the time constraint errors to those instances where the travel exceeds the end time plus the end time constraint. The parameter is defined in minutes. The default is zero.

ENFORCE_PARKING_LANES

Flow-Time Service Keys Boolean

EQUATION_PARAMETERS_1

The equation parameters key is optional. A volume-delay equation is used by the link delay updates. The "x" at the end of the key refers to the facility type. For example, EQUATION_PARAMETERS_1 specifies the volume-delay equation used for Freeways. If an equation is not provided for a given facility type, the program uses the equation from a lower facility type code. Each key requires four values. The first is the functional type code. The only code that is currently implemented is "BPR". This is followed by the three BPR parameters as floating point numbers separated by a comma. The default values are 0.15, 4.0, and 0.75. The BPR equation for computing the link travel time is:

$$t = t0\ (1 + alpha(Volume/Capacity)Beta$$

Where

t = Loaded Travel Time in seconds
t0 = Base Travel Time in seconds
alpha = BPR "A" parameter (default 0.15)
Beta = BPR "B" parameter (default 4.00)
Volume = Volume on the link in a given time period
Capacity = Adjusted Capacity of a link in a given time period

Capacity of the link for a given time period is estimated as follows:

Capacity = BPRFactor x HourlyCapacity x (TimeIncrement / 3600)

Where

BPRFactor = BPR "C" parameter (default 0.75)
TimeIncrement = TimePeriod (in seconds)

EXPRESSWAY_BIAS_FACTORS_1

Replaces FACILITY_BIAS_FACTORS; this is a list of impedance adjustment factors for expressways. It is optional and defaults to 1.

EXTENDED_GREEN_FACTOR_1

IntControl Control Keys (blank)

EXTERNAL_STATION_OFFSET

TransimsNet Control Keys (blank)

The EXTERNAL_STATION_OFFSET parameter control key is a new addition to TransimsNet 5.0. This parameter is hardcoded with a value of 30 meters in TransimsNet 4.0. Refer to the Highway Network How-To Guide for additional information on this control key.

EXTERNAL_ZONE_RANGE

TransimsNet Control Keys List

This key is optional and replaces FIRST_EXTERNAL_ZONE_NUMBER from Version 4. The external zone range in TransimsNet Version 5 is used to define the list of nodes where zone connectors need to be converted to network links and special activity locations are generated. This list is specified using a range of external zones which consists of two zone numbers separated by two periods (e.g., 74..85).

FACILITY_ACCESS_WARRANT_1

TransimsNet Control Keys (blank)

FACILITY_BIAS_FACTORS_1

Path Building Service Keys (blank)

FACILITY_INDEX_FIELD

NetPrep Control Keys (blank)

FARE_CLASS_DISTRIBUTION

FARE_CLASS_DISTRIBUTION 0

FILE_FORMATS

The file format keys include DEFAULT_FILE_FORMAT, NODE_FORMAT, ZONE_FORMAT, SHAPE_FORMAT, LINK_FORMAT, POCKET_FORMAT, LANE_USE_FORMAT, LOCATION_FORMAT, PARKING_FORMAT, ACCESS_FORMAT, CONNECTION_FORMAT, TURN_PENALTY_FORMAT, SIGN_FORMAT, SIGNAL_FORMAT, TIMING_PLAN_FORMAT, PHASING_PLAN_FORMAT, DETECTOR_FORMAT, TRANSIT_STOP_FORMAT, TRANSIT_ROUTE_FORMAT, TRANSIT_SCHEDULE_FORMAT, TRANSIT_DRIVER_FORMAT, ROUTE_NODES_FORMAT, VEHICLE_TYPE_FORMAT, HOUSEHOLD_FORMAT, SELECTION_FORMAT, TRIP_FORMAT, LINK_DELAY_FORMAT, VEHICLE_FORMAT, PLAN_FORMAT, NEW_PLAN_FORMAT, NEW_PROBLEM_FORMAT, NEW_LINK_DELAY_FORMAT.

These keys are optional. The default value is TAB_DELIMITED, and other values include TEXT, BINARY, FIXED_COLUMN, COMMA_DELIMITED, SPACE_DELIMITED, TAB_DELIMITED, CSV_DELIMITED, DBASE, SQLITE3, VERSION3.

In the previous version of TRANSIMS (v4), the default value was VERSION3. It is now TAB_DELIMITED.

TRANSIMS applies file formats in the following order, using the first file format that is found:

1. *If a .def file is provided, the format given in the first line of that file is used. Note that in cases where the file has nested fields (for example, the SHAPE file), a .def file must be provided. Otherwise it is optional.*
2. *If a specific file format was given in the control file (e.g. NODE_FORMAT, CSV_DELIMITED), then the file format given in the control file is used.*

3. *If the DEFAULT_FILE_FORMAT is given in the control file, it is used.*
4. *If the DEFAULT_FILE_FORMAT is specified in the TRANSIMS config.txt file, it is used.*
5. *Otherwise, the default value of TAB_DELIMITED is assumed.*

FIRST_HOUSEHOLD_NUMBER

ConvertTrips Control Keys

This was the STARTING_HOUSEHOLD_ID in Version 4. This optional key specifies the integer number used to begin the household ID numbering. The default value is one or the highest household ID in the input household file. If the results of this application are to be combined with the results of other **ConvertTrips** applications, the user must define an appropriate offset to ensure unique Household IDs in the combined file.

FIRST_LINK_NUMBER

NetPrep Control Keys Integer

This optional key specifies the integer value of the first link number. If after copying the field name and applying the conversion script, the link and/or node numbers are not defined, the program will automatically create link and/or node numbers starting from the specified first values. If not specified, the first link number defaults to 1. The possible range of values is from one (1) to 1000000000 (one billion).

FIRST_NODE_NUMBER

NetPrep Control Keys Integer

This optional key specifies the integer value of the first node number. If after copying the field name and applying the conversion script, the link and/or node numbers are not defined, the program will automatically create link and/or node numbers starting from the specified first values. If not specified, the first node number defaults to 1. The possible range of values is from one (1) to 1000000000 (one billion).

FIRST_WAIT_VALUES_1

The first wait values key are optional and when provided specifies the impedance values for time the traveler spends waiting for the first transit vehicle. The values can range from zero to 1000.0. The default value is 20.0 impedance units / second. This value is multiplied by the difference between the time of day when the traveler arrives at a transit stop and the time when the next transit vehicle is scheduled to leave that stop. If household types are defined, this key can include a list of values corresponding to each household type. For example, 20, 25, 30 can be specified to define the first wait time value for household types 1, 2 and 3+, respectively.

FIX_VEHICLE_LOCATIONS

Flow-Time Service Keys Boolean

FLATTEN_OUTPUT_FLAG

NewFormat Control Keys Boolean

FLOW_UNITS

System File Keys (blank)

FREEWAY_BIAS_FACTORS_1

Replaces FACILITY_BIAS_FACTORS; this is a list of impedance adjustment factors for freeway. It is optional and defaults to 1.

FROM_NODE_FIELD_NAME

LinkData Control Keys (blank)

GENERAL_GREEN_FACTOR_1

IntControl Control Keys (blank)

HOUSEHOLD_FORMAT

System File Keys FILE_FORMAT

IGNORE_ROUTING_PROBLEMS

IGNORE_ROUTING_PROBLEMS FALSE //---- TRUE/FALSE, YES/NO, 1/0, T/F, Y/N

IGNORE_TIME_CONSTRAINTS

The ignore time constraints key is optional and when provided controls how the activity start time impacts path building. The key is “false” by default. This means that the trip must be completed before the upper bound of the activity start time. If the trip takes too long, a time schedule error is registered in the problem file. If the key is “true”, the program will continue building the path without consideration of the activity schedule. The start time of the next trip will be the arrival time of the previous trip plus the duration of the activity. If the first character of the key is “0”, “N”, “n”, “F”, or “f”, the key is interpreted as “false”. Anything else is interpreted as “true”.

IGNORE_VEHICLE_ID

The vehicle file processing is made optional based on this key value. If TRUE, the vehicle file is not processed and the location of the vehicle is assumed connected to the parking lot attached to the origin and destination activity locations. The default value is FALSE. This implies that the vehicle file is read and the location of the vehicles is check and repositioned based on the path building result. Setting this key to TRUE can save processing time, but it is primarily used to build drive plans for transit trips as input to a PlanSum process to generate travel time skims for a model choice model.

IMPEDANCE_SORT_METHOD

Path Building Service Keys Boolean

INPUT_COORDINATE_ADJUSTMENT

Simulation Service Keys **List**

The input coordinate adjustment key enables the user to manipulate the coordinates before they are sent to the input coordinate conversion calculation. This key is optional. It is only needed if the coordinates are not in the units expected by the conversion algorithm. By default, TRANSIMS data files store coordinate data in meters that don't require any adjustments. The adjustment command includes four floating-point numbers separated by commas (X Offset, Y Offset, X Factor, Y Factor). The first two numbers are the X and Y offsets. The last two numbers are X and Y adjustment factors. The process adds the offset value to the coordinate and then applies the adjustment factor. In other words:

X = (EASTING + X_offset) * X_factor
Y = (NORTHING + Y_offset) * Y_factor

INPUT_COORDINATE_SYSTEM

Simulation Service Keys **List**

This key has a CSV list format and is optional. The input coordinate command may include up to three comma-separated parts (e.g., UTM, 15N, meters; or LATLONG). The first part is the coordinate system description. The options include STATEPLANE, UTM, and LATLONG. The second part identified the code number within the coordinate system that relates to the local conversion parameters. For UTM coordinates these codes range from 1N to 23N. Stateplane coordinates are defined using four digit FIPS codes (e.g., Oregon North = 3601). A code is not needed for the Latitude/Longitude system. The third parameter defines the coordinate units. By default, UTM is in meters, Stateplane is in feet, and Latitude/Longitude is in degrees. The

user can override these assumptions using the following keywords: FEET, METERS, MILES, KILOMETERS, DEGREES, and MILLION_DEGREES.

INPUT_LINK_FORMAT

NetPrep Control Keys FILE_FORMAT

INPUT_NODE_FORMAT

NetPrep Control Keys FILE_FORMAT

INPUT_SPDCAP_FORMAT

NetPrep Control Keys (blank)

INPUT_UNITS_OF_MEASURE

NetPrep Control Keys (blank)

INPUT_ZONE_FORMAT

NetPrep Control Keys FILE_FORMAT

INTCONTROL_REPORT_1

IntControl Control Keys (blank)

INTERNAL_ZONE_RANGE

NetPrep Control Keys List

The internal zone range key is optional. This parameter defines the range of node numbers that represent internal zones so the connectors to these nodes can be deleted. Internal zone connectors are/should be deleted during the NetPrep process. NetPrep Version 5 supports zone numbering systems that start with low values as external stations as well as the more traditional arrangement where external zones are at the end of the zone list. This key has a possible value range of 0..10000 and is turned off by default (i.e., assigned a '0' value).

KEEP_LINK_RANGE

NetPrep Control Keys List

The delete link range is optional and if specified defines a series of link numbers where the pocket lanes, activity locations, parking lots, processing links and link are not deleted by TRANSIMS programmatically. The lane connectivity at both ends of the link is also updated. The

range is a comma separated list of link ranges. A link range is specified using two periods (e.g., 1, 2, 4..10, 100..200, 300).

KEEP_NODE_RANGE

NetPrep Control Keys List

The keep node range is optional and if specified defines a series of node numbers where the lane connectivity, traffic control warrants, and the node are not to be deleted by TRANSIMS programmatically. The range is a comma separated list of node ranges. A node range is specified using two periods (e.g., 1, 2, 4..10, 100..200, 300).

KISS_RIDE_STOP_TYPES

KISS_RIDE_STOP_TYPES EXTERNAL

KISS_RIDE_TIME_FACTOR_1

KISS_RIDE_TIME_FACTOR_1 2.5 //---- 1.0..4.4

LANE_USE_FORMAT

System File Keys FILE_FORMAT

LANE_WIDTH

Draw Service Keys (blank)

LEFT_TURN_PENALTIES_1

The left turn penalty keys are optional and when provided specifies an additional impedance value for lane connections identified as left turns. The values can range from zero to 10000.0. The default value is 0.0 impedance units. This value is added to the impedance of the departure link of a drive path. If household types are defined, this key can include a list of values corresponding to each household type. For example, 0, 100, 200 can be specified to define the left turn penalty for household types 1, 2 and 3+, respectively.

LIMIT_PARKING_ACCESS

The limit parking access key is optional and when provided controls the way vehicles are associated with activity locations. The key is “true” by default. This means that the vehicle must be parked at a parking lot directly associated with the activity location. If the key is

"false", the program will build a walk path between the activity location and the vehicle. If the first character of the key is "0", "N", "n", "F", or "f", the key is interpreted as "false".

LINK_DELAY_FLOW_FACTOR

LINK_DELAY_FLOW_FACTOR 1.0 //---- 1..100000

LINK_DELAY_FORMAT

System File Keys FILE_FORMAT

LINK_DELAY_UPDATE_RATE

The link delay update rate key is optional. The value can range from zero to 1,000,000 trips. The default value of zero disables link delay updates. If the key is one or greater, the program will use the BPR volume-delay function to calculate the travel times on each link based on the current volumes in each time period. Time periods are defined by the input link delay file or default to 15 minutes if a link delay file is not provided. This parameter defines the number of trips that are loaded between travel time updates.

Note that this parameter should only be used for initial incremental loading. This parameter should be zero if the input link delay file was generated by the TRANSIMS Simulator. Microsimulator delays can be significantly different from volume to capacity based delays. If link delay updates are enabled, the delays from the Microsimulator are destroyed by the first update cycle.

LINK_DIRECTION_OFFSET

Draw Service Keys (blank)

LINK_FORMAT

System File Keys FILE_FORMAT

LINK_USE_FLAG_TYPES_1

LocationData Control Keys (blank)

LINKSUM_REPORT_1

LinkSum Control Keys (blank)

LOCAL_ACCESS_DISTANCE

LOCAL_ACCESS_DISTANCE 2000 meters //---- 100..7500 meters

LOCAL_FACILITY_TYPE

LOCAL_FACILITY_TYPE EXTERNAL //---- MAJOR..LOCAL, EXTERNAL

LOCAL_IMPEDANCE_FACTOR

LOCAL_IMPEDANCE_FACTOR 0.0 //---- 0.0..25.0

LOCAL_SELECTION_SPACING_*

NetPrep Control Keys List

This key is optional and defaults to one (1) and selects representative local streets from an all-streets network for inclusion in the TRANSIMS network. * is the first area type value in the list. This key supports up to 100 area types.

Application options:

LOCAL_SELECTION_SPACING = 100, 200, 300, 400
LOCAL_SELECTION_SPACING_1 = 100, 200, 300, 400
LOCAL_SELECTION_SPACING_2 = 200
LOCAL_SELECTION_SPACING_10 = 1000, 1100, 1200

Result = 100, 200, 300, 400, 400, 400, 400, 400, 400, 1000, 1100, 1200

LOCAL_THRU_SEGMENT_LENGTHS_1

NetPrep Control Keys List

This key is optional and, if specified, assigns local streets to the new Local-Thru facility type based on the length of a series of local links.

LOCATION_FORMAT

System File Keys FILE_FORMAT

LOCATION_JOIN_FIELD_1

LocationData Control Keys (blank)

LOCATION_SELECTION_METHOD

PathSkim Control Keys (blank)

LOCATION_SIDE_OFFSET

Draw Service Keys (blank)

LOCATIONDATA_REPORT_1

LocationData Control Keys (blank)

LOOK_AHEAD_DISTANCE

Flow-Time Service Keys (blank)

LOOK_AHEAD_LANE_FACTOR

Flow-Time Service Keys (blank)

LOOK_AHEAD_TIME_FACTOR

Flow-Time Service Keys (blank)

MACROSCOPIC_SUBAREAS

Flow-Time Service Keys (blank)

MAX_ARRIVAL_TIME_VARIANCE

Flow-Time Service Keys (blank)

MAX_BICYCLE_DISTANCES_1

The maximum bicycle distance keys are optional. It defines the maximum cumulative bike distance for a given trip. If the value is zero, no bicycle limitations are imposed. Otherwise the value can range from 100 to 20,000 meters, with a default of 10,000 meters. If household types are defined, this key can include a list of values corresponding to each household type. For example, 4000, 3000, 2000 can be specified to define the maximum walk distance for household types 1, 2 and 3+, respectively.

MAX_CIRCUITY_DISTANCE

The maximum circuity distance key is optional. The value can range from zero to 100,000 meters. The default value is 20,000 meters. This value is used in conjunction with the maximum

circuity ratio to focus the path-building algorithm on links that are generally located between the trip origin and destination. If the origin and destination locations are far apart, the ratio calculation has little impact on the number of nodes that are considered by the path-building algorithm. This parameter is designed to help narrow the focus of long distance trips to more direct paths. The algorithm uses the minimum of the straight-line distance between the origin and destination multiplied by the circuity ratio and the maximum circuity distance to determine if a node is out of range. For example, this parameter will limit the trip distance to 20,000 meters longer than the straight-line distance between the origin and destination.

MAX_CIRCUITY_RATIO

The maximum circuity ratio key is optional. The value can be zero or between 1.0 and 10.0. The default value is zero (no circuity checks are made). This key defines the maximum permissible ratio between the sum of the distance a path node is from the trip origin and destination and the straight-line distance between the trip origin and destination. If the value is zero, no circuity checks are made. A value of 2.0 implies that the length of the travel path is limited to approximately twice the straight-line distance between the origin and the destination.

This parameter is designed to reduce the processing time of the **Router**. By focusing the path-building algorithm on links that are generally between the origin and the destination, the program can avoid wasting computational time considering paths in the wrong direction.

MAX_COMFORTABLE_SPEED_1

Flow-Time Service Keys (blank)

MAX_DEPARTURE_TIME_VARIANCE

Flow-Time Service Keys (blank)

MAX_KISS_RIDE_DROPOFF_WALK

Optional key giving the maximum walking distance after a kiss & ride drop off. The range is 10 to 500 meters, with a default of 100 meters.

MAX_KISS_RIDE_PERCENTS_1

The maximum kiss-&-ride percentage key is optional. It defines the maximum percentage of the total trip length that can be used to access an auto drop off area at a transit stop. The length is calculated as the straight-line distance between the trip origin and the drop-off area and the drop-off area and the trip destination. The lots with the 10 shortest total trip lengths are

selected for consideration by a kiss-&-ride trip. The value can range from 1 to 100 percent. The default value is 25 percent.

MAX_LEGS_PER_PATH

The maximum number of legs in a path is optional. The range is 10 to 10000, with a default value of 1000.

MAX_NUMBER_OF_PATHS_1

This key specifies the maximum number of paths. The range is 1 to 10, with a default of 4.

MAX_NUMBER_OF_TRANSFERS_1

The maximum number of transfers key is optional. It defines the maximum number of time the traveler can transfer between transit routes during a given trip. The value can range from zero to 10 transfers. The default value is 3 transfers.

MAX_PARK_RIDE_PERCENTS_1

The maximum park-&-ride percentage key is optional. It defines the maximum percentage of the total trip length that can be used to access a park-&-ride lot. The length is calculated as the straight-line distance between the trip origin and the park-&-ride lot and the park-&-ride lot and the trip destination. The lots with the 10 shortest total trip lengths are selected for consideration by a park-&-ride trip. The value can range from 1 to 100 percent. The default value is 50 percent.

MAX_PROBLEM_COUNT

Execution Service Keys Integer

The maximum number of problems key is optional and can be any non-negative integer (i.e., >= 0). The maximum problem count defines the number of modeling problems that are permitted before the problem terminates execution. The default value of zero disables this feature. It defaults to 0 (no limitation).

MAX_SUBZONE_DISTANCE_1

LocationData Control Keys (blank)

MAX_TRAVEL_TIME_RATIO

LinkDelay Control Keys (blank)

MAX_WAIT_TIMES_1

The maximum wait time key is optional. It defines the maximum time a person will consider waiting at each transit stop to board a vehicle. If the value is zero, no wait time limitations are imposed. Otherwise the value can range from 5 to 200 minutes. The default value is 60 minutes.

MAX_WALK_DISTANCE

LocationData Control Keys (blank)

MAX_WALK_DISTANCES_1

The maximum walk distance keys are optional. It defines the maximum cumulative walk distance for a given trip. This includes walks to and from the vehicle and any walks required by transfers. If the value is zero, no walk limitations are imposed. Otherwise the value can range from 100 to 10,000 meters. The default value is 2,000 meters. If household types are defined, this key can include a list of values corresponding to each household type. For example, 4000, 3000, 2000 can be specified to define the maximum walk distance for household types 1, 2 and 3+, respectively.

MAX_WARNING_EXIT_FLAG

Execution Service Keys Boolean

If the maximum number of warning messages is exceeded, this flag directs the program in what to do. If the flag is TRUE (the default), the program is terminated with an error message about the warning messages. If the flag is FALSE, the program continues execution, but no additional warning messages are sent to the screen or written to the printout file. The warning message counter continues to count the messages and reports the total at the end of the execution. Possible values include TRUE/FALSE, YES/NO, 1/0, T/F, Y/N, and the default is TRUE.

MAX_WARNING_MESSAGES

Execution Service Keys Integer

This key is optional and defaults to 100000 if a value is not specified. When the program generates a warning message, a counter is incremented and the total number of warning messages is reported and a warning return coded (2) is set at the end of the execution. By default the program prints up to 100,000 warning messages to the printout file. If more than 100,000 warning messages are sent, the program stops printing additional messages to the file or terminates the program with an error message based on the MAX_WARNING_EXIT_FLAG.

This parameter enables the user to modify the default warning limit. Valid values are non-negative integers (i.e., >= 0).

MAXIMUM_BANDWIDTH_SIZE

Draw Service Keys (blank)

MAXIMUM_CONNECTION_ANGLE

TransimsNet Control Keys (blank)

MAXIMUM_COST_DIFFERENCE

Select Service Keys (blank)

MAXIMUM_GREEN_FACTOR_1

IntControl Control Keys (blank)

MAXIMUM_LANE_CAPACITY_1

IntControl Control Keys (blank)

MAXIMUM_LENGTH_TO_XY_RATIO

NetPrep Control Keys Decimal

The maximum length to X-Y ratio key is optional. This key defaults to 1.2 when the value is not specified. This key is used to compare the link length in the input network file to the straight-line distance between the coordinates of the nodes at either end of the link and any shape points that are provided. If the length is less than the coordinate-based length, the output length is set equal to the coordinate-based length. If the ratio between the length and the coordinate-based length is greater than the value specified by this key, the program reduces the link length to the ratio times the coordinate-based length. For example, if the length field indicates the link is 1.3 miles long and the straight-line distance between the nodes is 1.0 miles, and the maximum ratio is 1.2, the program will reset the link length to 1.2 miles. The output printout file reports the number of links that were changed as a result of the distance checks.

MAXIMUM_LOADING_TIME

Flow-Time Service Keys (blank)

MAXIMUM_PERCENT_SELECTED

The maximum percent selected is optional. If a value is not provided, all of the plans selected by the selection criteria will be written to the household ID file. If a value is provided, it specifies the maximum percentage of the total households within the each plan file that can be selected for output. If the number of selected households exceeds this percentage, the random probability function is used to determine which of the selected households will be written to the output file.

MAXIMUM_RIDERSHIP_SIZE

ArcPlan Control Keys (blank)

MAXIMUM_SHAPE_ANGLE

ArcPlan Control Keys (blank)
NetPrep Control Keys Integer

This optional key specifies the maximum angle permitted in the output shape file. This key defaults to 90 degrees (NetPrep 5) if a value is not provided. The possible values range is {0, 5..120}.

MAXIMUM_SORT_SIZE

PlanPrep Control Keys (blank)
TripPrep Control Keys (blank)

MAXIMUM_SPEED_DIFFERENCE

Flow-Time Service Keys (blank)

MAXIMUM_SWAPPING_SPEED

Flow-Time Service Keys (blank)

MAXIMUM_TIME_DIFFERENCE

The maximum time difference key is used in conjunction with the link delay file to determine which plans are selected for output. If the difference between the calculated travel time and the plan duration is greater than this value (in minutes), the plan is always considered for output even if the percent difference is less than the select time ratios key. The default value for this parameter is 60 minutes.

MAXIMUM_WAITING_TIME

Flow-Time Service Keys (blank)

MERGE_LINK_DELAY_FORMAT

LinkDelay Control Keys FILE_FORMAT

MERGE_PLAN_FILES

PlanCompare Control Keys Boolean

MERGE_PLAN_FORMAT

PlanPrep Control Keys FILE_FORMAT

MERGE_TIME_PERIODS

System File Keys Boolean

MERGE_TRIP_FORMAT

TripPrep Control Keys FILE_FORMAT

MERGE_WEIGHTING_FACTOR

LinkDelay Control Keys (blank)

MESOSCOPIC_SUBAREAS

Flow-Time Service Keys (blank)

MICROSCOPIC_SUBAREAS

Flow-Time Service Keys (blank)

MICROSIMULATOR_REPORT_1

Microsimulator Control Keys (blank)

MIN_CIRCUITY_DISTANCE

The minimum circuity distance key is optional. The value can range from zero to 10,000 meters. The default value is 2,000 meters. This value is used in conjunction with the maximum circuity ratio to focus the path-building algorithm on links that are generally located between the trip origin and destination. If the origin and destination locations are relatively close from a

straightline distance perspective, but not as close from a network perspective, the ratio algorithm can limit the path building in illogical ways. This parameter is designed to help avoid this problem by permitting the algorithm to consider all nodes that are within a minimum distance of the origin and destination. For example, this parameter can allow the algorithm to consider nodes that are up to 2,000 meters away when the trip origin and destination are close to each other but on different streets.

MIN_WAIT_TIMES_1

0 seconds //---- 0..3600 seconds

MINIMUM_BANDWIDTH_SIZE

Draw Service Keys (blank)

MINIMUM_BANDWIDTH_VALUE

Draw Service Keys (blank)

MINIMUM_COST_DIFFERENCE

Select Service Keys (blank)

MINIMUM_LANE_CAPACITY_1

IntControl Control Keys (blank)

MINIMUM_LINK_FLOW

LinkSum Control Keys (blank)

MINIMUM_LINK_LENGTH

TransimsNet Control Keys (blank)

The MINIMUM_LINK_LENGTH parameter control key is not implemented in TransimsNet 5.0.

MINIMUM_PHASE_TIME_1

IntControl Control Keys (blank)

MINIMUM_RIDERSHIP_SIZE

ArcPlan Control Keys (blank)

MINIMUM_RIDERSHIP_VALUE

ArcPlan Control Keys (blank)

MINIMUM_SHAPE_LENGTH

ArcPlan Control Keys (blank)
NetPrep Control Keys **Integer**

This key is optional and sets the value for the minimum shape length permitted in the output shape file. If no value is provided, this defaults to 10 meters (NetPrep 5) with a range of (0..50}.

MINIMUM_TIME_DIFFERENCE

The minimum time difference key is used in conjunction with the link delay file to determine which plans are selected for output. If the difference between the calculated travel time and the plan duration is less than this value (in minutes), the plan is not considered for output even if the percent difference is greater than the PERCENT_TIME_DIFFERENCE key. The default value for this parameter is one minute.

MINIMUM_ZONE_LOCATIONS

LocationData Control Keys (blank)

MODEL_END_TIME

Execution Service Keys Time

The model end time defines the time-of-day at the end of the modeling process. The default value is 24:00. Since there tends to be a significant number of trips that start near midnight and may take some time to reach their destination, the model end time is often increased to a value such as 27:00 to ensure that all trips are completed. Other applications may wish to model travel over multiple days (e.g., hurricane evacuation studies). In this case, this control key can be set to 48:00 or 72:00. Valid values are times greater than the MODEL_START_TIME.

MODEL_START_TIME

Execution Service Keys Time

The model start time defines the time-of-day at the beginning of the modeling process. The default value is 0:00 or midnight. Many activity-based models consider the start of the day to be 3:00 AM when most people are at home in bed. Valid values are times greater than or equal to 0 [seconds], 0.0 [hours], 0:00.

MODEL_TIME_INCREMENT

Execution Service Keys Time

This is an optional key and defaults to a value of 15 minutes if not specified. The model time increment defines the standard time period resolution used for dynamic assignments. The combination of time increments and model start and end times establishes the number of time periods used for defining link travel times and speeds. For example, the default parameters create 96 different travel time values for each link. The time increment used for routing and link delay processing. Valid values are from two to 240 (2..240) minutes.

NEAREST_NEIGHBOR_FACTOR

System File Keys (blank)

NETPREP_REPORT_#

NetPrep Control Keys Text

This is an optional key for NetPrep, and if used, the "#" is replaced by the number one (1) or two (2). Neither, one, or both of the following could be included in the control file if the user desires to see the associated report(s) appended to the output PRN file:

NETPREP_REPORT_1	CONVERSION_SCRIPT
NETPREP_REPORT_2	CONVERSION_STACK

The CONVERSION_SCRIPT report, if included, will append the conversion script used with NetPrep (assuming one has been used) to the end of the PRN file. The CONVERSION_STACK report, if included, will append a numeric list of the computations used, in order, to process the conversion script file. One use of this report would be to review the computational processing associated with the conversion script to ensure that values were correctly assigned to and compared with other values, in the correct order, etc. If errors are discovered, the conversion script could simply be edited and NetPrep re-run.

NEW_AB_SPEED_FIELD_NAME

LinkData Control Keys (blank)

NEW_AB_VOLUME_FIELD_NAME

LinkData Control Keys (blank)

NEW_ACCESS_FORMAT

System File Keys FILE_FORMAT

NEW_BA_SPEED_FIELD_NAME

LinkData Control Keys (blank)

NEW_BA_VOLUME_FIELD_NAME

LinkData Control Keys (blank)

NEW_CONNECTION_FORMAT

System File Keys FILE_FORMAT

NEW_DATA_FORMAT_1

FileFormat Control Keys FILE_FORMAT

NEW_DETECTOR_FORMAT

System File Keys FILE_FORMAT

NEW_DIRECTIONAL_DATA_FORMAT

LinkData Control Keys FILE_FORMAT

NEW_EVENT_COORDINATES_1

Turn Volume Output Keys (blank)

NEW_EVENT_FILTER_1

Turn Volume Output Keys (blank)

NEW_EVENT_FORMAT_1

Turn Volume Output Keys FILE_FORMAT

NEW_EVENT_LINK_RANGE_1

Turn Volume Output Keys (blank)

NEW_EVENT_MODE_RANGE_1

Turn Volume Output Keys (blank)

NEW_EVENT_SUBAREA_RANGE_1

Turn Volume Output Keys (blank)

NEW_EVENT_TIME_FORMAT_1

Turn Volume Output Keys (blank)

NEW_EVENT_TIME_RANGE_1

Turn Volume Output Keys (blank)

NEW_EVENT_TYPE_RANGE_1

Turn Volume Output Keys (blank)

NEW_GROUP_TRAVEL_FORMAT

LinkSum Control Keys FILE_FORMAT

NEW_HOUSEHOLD_FORMAT

System File Keys FILE_FORMAT

NEW_LANE_USE_FORMAT

System File Keys FILE_FORMAT

NEW_LINK_ACTIVITY_FORMAT

LinkSum Control Keys FILE_FORMAT

NEW_LINK_DATA_FIELD_1

LinkSum Control Keys (blank)

NEW_LINK_DATA_FORMAT

LinkData Control Keys FILE_FORMAT

NEW_LINK_DATA_FORMAT_1

LinkSum Control Keys FILE_FORMAT

NEW_LINK_DELAY_COORDINATES_1

Link Delay Output Keys (blank)

NEW_LINK_DELAY_FLOW_TYPE_1

Link Delay Output Keys (blank)

NEW_LINK_DELAY_FORMAT

System File Keys FILE_FORMAT

NEW_LINK_DELAY_FORMAT_1

Link Delay Output Keys FILE_FORMAT

NEW_LINK_DELAY_INCREMENT_1

Link Delay Output Keys (blank)

NEW_LINK_DELAY_LINK_RANGE_1

Link Delay Output Keys (blank)

NEW_LINK_DELAY_SUBAREA_RANGE_1

Link Delay Output Keys (blank)

NEW_LINK_DELAY_TIME_FORMAT_1

Link Delay Output Keys (blank)

NEW_LINK_DELAY_TIME_RANGE_1

Link Delay Output Keys (blank)

NEW_LINK_DELAY_TURN_FLAG_1

Link Delay Output Keys Boolean

NEW_LINK_DELAY_VEH_TYPES_1

Link Delay Output Keys (blank)

NEW_LINK_DIRECTION_FIELD_1

LinkSum Control Keys (blank)

NEW_LINK_DIRECTION_FORMAT_1

LinkSum Control Keys FILE_FORMAT

NEW_LINK_DIRECTION_INDEX_1

LinkSum Control Keys (blank)

NEW_LINK_FORMAT

System File Keys FILE_FORMAT

NEW_LINK_SUMMARY_FORMAT

ArcSnapshot Control Keys FILE_FORMAT

NEW_LOCATION_FIELD_1

LocationData Control Keys (blank)

NEW_LOCATION_FORMAT

System File Keys FILE_FORMAT

NEW_NODE_FORMAT

System File Keys FILE_FORMAT

NEW_OCCUPANCY_COORDINATES_1

Turn Volume Output Keys (blank)

NEW_OCCUPANCY_FORMAT_1

Turn Volume Output Keys FILE_FORMAT

NEW_OCCUPANCY_INCREMENT_1

Turn Volume Output Keys (blank)

NEW_OCCUPANCY_LINK_RANGE_1

Turn Volume Output Keys (blank)

NEW_OCCUPANCY_MAX_FLAG_1

Turn Volume Output Keys Boolean

NEW_OCCUPANCY_SUBAREA_RANGE_1

Turn Volume Output Keys (blank)

NEW_OCCUPANCY_TIME_FORMAT_1

Turn Volume Output Keys (blank)

NEW_OCCUPANCY_TIME_RANGE_1

Turn Volume Output Keys (blank)

NEW_PARKING_FORMAT

System File Keys FILE_FORMAT

NEW_PERFORMANCE_COORDINATES_1

Performance Output Keys (blank)

NEW_PERFORMANCE_DATA_FORMAT

LinkSum Control Keys FILE_FORMAT

NEW_PERFORMANCE_FLOW_TYPE_1

Performance Output Keys (blank)

NEW_PERFORMANCE_FORMAT

System File Keys FILE_FORMAT

NEW_PERFORMANCE_FORMAT_1

Performance Output Keys FILE_FORMAT

NEW_PERFORMANCE_INCREMENT_1

Performance Output Keys (blank)

NEW_PERFORMANCE_LINK_RANGE_1

Performance Output Keys (blank)

NEW_PERFORMANCE_SUBAREA_RANGE_1

Performance Output Keys (blank)

NEW_PERFORMANCE_TIME_FORMAT_1

Performance Output Keys (blank)

NEW_PERFORMANCE_TIME_RANGE_1

Performance Output Keys (blank)

NEW_PERFORMANCE_TURN_FLAG_1

Performance Output Keys Boolean

NEW_PERFORMANCE_VEH_TYPES_1

Performance Output Keys (blank)

NEW_PHASING_PLAN_FORMAT

System File Keys FILE_FORMAT

NEW_PLAN_FORMAT

System File Keys FILE_FORMAT

NEW_POCKET_FORMAT

System File Keys FILE_FORMAT

NEW_PROBLEM_FORMAT

System File Keys FILE_FORMAT

NEW_RIDERSHIP_ALL_STOPS_1

Ridership Output Keys Boolean

NEW_RIDERSHIP_FORMAT

System File Keys FILE_FORMAT

NEW_RIDERSHIP_FORMAT_1

Ridership Output Keys FILE_FORMAT

NEW_RIDERSHIP_ROUTE_RANGE_1

Ridership Output Keys (blank)

NEW_RIDERSHIP_TIME_FORMAT_1

Ridership Output Keys (blank)

NEW_RIDERSHIP_TIME_RANGE_1

Ridership Output Keys (blank)

NEW_ROUTE_NODES_FORMAT

System File Keys FILE_FORMAT

NEW_SELECTION_FORMAT

System File Keys FILE_FORMAT

NEW_SHAPE_FORMAT

System File Keys FILE_FORMAT

NEW_SIGN_FORMAT

System File Keys FILE_FORMAT

NEW_SIGNAL_FORMAT

System File Keys FILE_FORMAT

NEW_SKIM_FORMAT

System File Keys FILE_FORMAT

NEW_SNAPSHOT_CELL_FLAG_1

Simulation Service Keys Boolean

NEW_SNAPSHOT_COMPRESSION

NewFormat Control Keys Boolean

NEW_SNAPSHOT_COMPRESSION_1

Simulation Service Keys Boolean

NEW_SNAPSHOT_COORDINATES_1

Simulation Service Keys (blank)

NEW_SNAPSHOT_FORMAT

ArcSnapshot Control Keys FILE_FORMAT
NewFormat Control Keys FILE_FORMAT

NEW_SNAPSHOT_FORMAT_1

Simulation Service Keys FILE_FORMAT

NEW_SNAPSHOT_INCREMENT_1

Simulation Service Keys (blank)

NEW_SNAPSHOT_LINK_RANGE_1

Simulation Service Keys (blank)

NEW_SNAPSHOT_LOCATION_FLAG_1

Simulation Service Keys Boolean

NEW_SNAPSHOT_MAX_SIZE_1

Simulation Service Keys (blank)

NEW_SNAPSHOT_STATUS_FLAG_1

Simulation Service Keys Boolean

NEW_SNAPSHOT_SUBAREA_RANGE_1

Simulation Service Keys (blank)

NEW_SNAPSHOT_TIME_FORMAT_1

Simulation Service Keys (blank)

NEW_SNAPSHOT_TIME_RANGE_1

Simulation Service Keys (blank)

NEW_SUBZONE_FIELD_1

LocationData Control Keys (blank)

NEW_TIMING_PLAN_FORMAT

System File Keys FILE_FORMAT

NEW_TRANSIT_DRIVER_FORMAT

System File Keys FILE_FORMAT

NEW_TRANSIT_FARE_FORMAT

System File Keys FILE_FORMAT

NEW_TRANSIT_ROUTE_FORMAT

System File Keys FILE_FORMAT

NEW_TRANSIT_SCHEDULE_FORMAT

System File Keys FILE_FORMAT

NEW_TRANSIT_STOP_FORMAT

System File Keys FILE_FORMAT

NEW_TRIP_FORMAT

System File Keys FILE_FORMAT

NEW_TURN_PENALTY_FORMAT

System File Keys FILE_FORMAT

NEW_TURN_VOLUME_FILTER_1

Turn Volume Output Keys (blank)

NEW_TURN_VOLUME_FORMAT

LinkSum Control Keys FILE_FORMAT

NEW_TURN_VOLUME_FORMAT_1

Turn Volume Output Keys FILE_FORMAT

NEW_TURN_VOLUME_INCREMENT_1

Turn Volume Output Keys (blank)

NEW_TURN_VOLUME_NODE_RANGE_1

Turn Volume Output Keys (blank)

NEW_TURN_VOLUME_SUBAREA_RANGE_1

Turn Volume Output Keys (blank)

NEW_TURN_VOLUME_TIME_FORMAT_1

Turn Volume Output Keys (blank)

NEW_TURN_VOLUME_TIME_RANGE_1

Turn Volume Output Keys (blank)

NEW_USE_FLAG_FIELD_1

LocationData Control Keys (blank)

NEW_VEHICLE_FORMAT

System File Keys FILE_FORMAT

NEW_VEHICLE_TYPE_FORMAT

System File Keys FILE_FORMAT

NEW_WALK_ACCESS_FIELD

LocationData Control Keys (blank)

NEW_ZONE_FORMAT

System File Keys FILE_FORMAT

NEW_ZONE_TRAVEL_FORMAT

LinkSum Control Keys FILE_FORMAT

NODE_FORMAT

System File Keys FILE_FORMAT

NODE_LIST_PATHS

NewFormat Control Keys Boolean

NOTES_AND_NAME_FIELDS

System File Keys Boolean

NUMBER_OF_ITERATIONS

Simulation Service Keys (blank)

NUMBER_OF_PARTITIONS

RandomSelect Control Keys (blank)

NUMBER_OF_RINGS_1

IntControl Control Keys (blank)

NUMBER_OF_THREADS

Execution Service Keys Integer

This parameter is only used for programs where multi-thread processing is enabled. TRANSIMS uses the Boost library to implement processing threads. The software can be compiled with or without this library. If the library is included and the program is thread enabled, the number of threads key instructs the program on the number of CPUs that will be used for parallel data processing. The key value can range from 1 to 64. The user can disable the multi-thread processing by setting this key to 1. If the key value is greater than one and the particular program or compiled executable does not support multi-threading, a warning message is written to the screen. The default value is 1.

OCCUPANCY_FORMAT

ArcSnapshot Control Keys FILE_FORMAT

ONEWAY_ARROW_LENGTH

Draw Service Keys (blank)

ONEWAY_ARROW_SIDE_OFFSET

Draw Service Keys (blank)

ORIGIN_LOCATIONS_PER_ZONE

PathSkim Control Keys (blank)

ORIGIN_WEIGHT_FIELD_1

ConvertTrips Control Keys (blank)

OUTPUT_COORDINATE_ADJUSTMENT

Simulation Service Keys List

The output coordinate adjustment enables the user to manipulate the coordinates after they are returned from the output coordinate conversion calculation. This key is optional. It is only needed if the output coordinates should be in units that are different from the conversion algorithm. By default, TRANSIMS data files store coordinate data in meters that don't require any adjustments. The adjustment command includes four floating-point numbers separated by commas. The first two numbers are the X and Y offsets. The last two numbers are X and Y adjustment factors. The process adds the offset value to the coordinate and then applies the adjustment factor. In other words:

X = (X + X_offset) * X_factor
Y = (Y + Y_offset) * Y_factor

OUTPUT_COORDINATE_SYSTEM

Simulation Service Keys List

This key has a CSV list format and is optional. The output coordinate system determines how the locations from the input shape file are converted into X-Y coordinates in the output Node, Link, and Shape files. This key is only needed if coordinate conversions are desired.

The output coordinate command includes three parts separated by a comma. The first part is the coordinate system description. The options include UTM, STATEPLANE, and LATLONG. The second part identifies the code number within the coordinate system that relates to the local conversion parameters. For UTM coordinates these codes range from 1N to 23N. Stateplane coordinates are defined using four digit FIPS codes (e.g., Oregon North = 3601). A code is not needed for the Latitude/Longitude system. The third parameter defines the coordinate units. By default, UTM is in meters, Stateplane is in feet, and Latitude/Longitude is in degrees. The user can override these assumptions using the following keywords: FEET, METERS, MILES, KILOMETERS, DEGREES, and MILLION_DEGREES.

OUTPUT_XYM_SHAPES

Simulation Service Keys Boolean

By default, this key is FALSE, and the output files will use X and Y coordinates. If the key is TRUE, the output file will have X, Y and M (measure) coordinates. Possible values are TRUE/FALSE, YES/NO, 1/0, T/F, Y/N.

OUTPUT_XYZ_SHAPES

Simulation Service Keys Boolean

By default, this key is FALSE, and the output files will use X and Y coordinates. If the key is TRUE, the output file will have X, Y and Z coordinates. Possible values are TRUE/FALSE, YES/NO, 1/0, T/F, Y/N.

PAD_FILE_TIME_LABEL

ArcSnapshot Control Keys Boolean

PARKING_DETAILS_WARRANT_1

TransimsNet Control Keys (blank)

PARKING_FORMAT

System File Keys FILE_FORMAT

PARKING_SIDE_OFFSET

Draw Service Keys (blank)

PARKING_TIME_VALUES_1

Path Building Service Keys (blank)

PATHSKIM_REPORT_1

PathSkim Control Keys (blank)

PERCENT_COST_DIFFERENCE

Select Service Keys (blank)

PERCENT_MOVED_BACKWARD

Simulation Service Keys (blank)

PERCENT_MOVED_FORWARD

Simulation Service Keys (blank)

PERCENT_RANDOM_IMPEDANCE

The percent random impedance key is optional and specifies the amount of random impedance effects. The key can range from zero to 100 percent. The default value is zero. Zero implies that all travelers perceive the impedance on a given link in exactly the same way. Non-zero parameters cause the program to randomly adjust the link impedance each time it is considered by the path-building algorithm. A value of 20 means that the impedance perceived by the traveler may be as much as 10 percent less or 10 percent more than the “actual” impedance.

PERCENT_TIME_DIFFERENCE

The percent time difference key is used in conjunction with the link delay file to determine which plans have a computed travel time that is significantly different from the plan duration. The program uses the link delay information by time period to calculate the travel time using the plan links. This value is subtracted from and divided by the plan duration to estimate the

percent difference. If the percent difference for a given plan is greater than the percent time difference key, the household is selected for output to the household ID file. The default value for this parameter is 0.

PERFORMANCE_FORMAT

System File Keys FILE_FORMAT

PERIOD_CONTROL_POINT

Data Service Keys (blank)

PERMISSION_PROBABILITY_1

Flow-Time Service Keys (blank)

PERMITTED_LEFT_FACTOR_1

IntControl Control Keys (blank)

PHASING_PLAN_FORMAT

System File Keys FILE_FORMAT

PLAN_FOLLOWING_DISTANCE

Flow-Time Service Keys (blank)

PLAN_FORMAT

System File Keys FILE_FORMAT

PLAN_SORT_TYPE

Data Service Keys (blank)

PLANCOMPARE_REPORT_1

PlanCompare Control Keys (blank)

PLANSUM_REPORT_1

PlanSum Control Keys (blank)

POCKET_FORMAT

System File Keys FILE_FORMAT

POCKET_LANE_FACTOR_1

IntControl Control Keys (blank)

POCKET_LANE_WARRANT_1

TransimsNet Control Keys (blank)

POCKET_SIDE_OFFSET

Draw Service Keys (blank)

PRINT_MERGE_WARNINGS

IntControl Control Keys Boolean

PRINT_PROBLEM_MESSAGES

Flow-Time Service Keys Boolean

PRINT_SIGN_WARNINGS

IntControl Control Keys Boolean

PRINT_UPDATE_WARNINGS

PRINT_UPDATE_WARNINGS FALSE //---- TRUE/FALSE, YES/NO, 1/0, T/F, Y/N

PRIORITY_LOADING_TIME

Flow-Time Service Keys (blank)

PRIORITY_WAITING_TIME

Flow-Time Service Keys (blank)

PROBLEM_FORMAT

System File Keys FILE_FORMAT

PROCESSING_METHOD

LinkDelay Control Keys (blank)

PROJECT_DIRECTORY

Execution Service Keys Text

The project directory key is optional. If the project directory key is specified, it is added to all file names referenced by the program. If it is not specified, all file names should fully specify the file path relative to the current directory. This key can be specified in a config.txt file (as a global value), in any or all of the control files, or both. If a control file specifies a different directory than the config.txt file, then the control file specification overrides the config.txt file specification.

RAIL_BIAS_CONSTANTS_1

The rail bias constants are optional, and have a default of 0. When provided, the total impedance value for each rail segment of a transit trip is adjusted by this value. The value should be negative impedance units. It is applied after the rail bias factor is applied. The resulting impedance will not be less than zero. Rail is defined as any transit mode other than bus (i.e., TROLLEY, STREETCAR, LIGHTRAIL, RAPIDRAIL, REGIONRAIL). If household types are defined, this key can include a list of factors corresponding to each household type. For example, -300, -400, -500 can be specified to define the rail bias constant for household types 1, 2 and 3+, respectively.

RAIL_BIAS_FACTORS_1

The rail bias factors are optional and when provided factors down the total impedance value for each segment of a transit trip that uses rail. The value can range from 0.1 to 1.0. The default value is 1.0. This value factors the impedance of rail legs. Rail is defined as any transit mode other than bus (i.e., TROLLEY, STREETCAR, LIGHTRAIL, RAPIDRAIL, REGIONRAIL). If household types are defined, this key can include a list of factors corresponding to each household type. For example, 1.0, 0.9, 0.8 can be specified to define the rail bias factor for household types 1, 2 and 3+, respectively.

RANDOM_NUMBER_SEED

Execution Service Keys Integer

This key is optional. The random number seed key specifies the starting point for a list of random numbers and is used for random impedance calculations. Any non-negative integer (i.e., >= 0) can be specified. If the value is zero or if no key is provided, the program uses the

computer clock to set the random number seed. The selected seed value is written to the printout report to enable the user to re-run the model using the same random number sequence.

RED_CLEAR_PHASE_TIME_1

IntControl Control Keys (blank)

RELOAD_CAPACITY_PROBLEMS

Flow-Time Service Keys Boolean

REPORT_DIRECTORY

Execution Service Keys Text

This is an optional key that specifies the report directory path if provided. If the report directory key is specified, it is added to the report file name specified by the Report File key or the default report file name derived from the control file name. By default, the report file is created in the same directory as the control file. If the control file name includes path information, the path string is removed and replaced by the report directory string.

REPORT_FLAG

Execution Service Keys Text

The report flag key is optional. Possible values are TRUE/FALSE, YES/NO, 1/0, T/F, Y/N, and the default is FALSE. If the report flag key is YES or TRUE, the report file or default printout file will open in "Append" mode rather than "Create" mode. This permits the user to consolidate the output of several programs into a single report file.

REROUTE_FROM_TIME_POINT

REROUTE_FROM_TIME_POINT 0:00

RETURN_TRIP_FLAG_1

ConvertTrips Control Keys Boolean

RIDERSHIP_FORMAT

System File Keys FILE_FORMAT

RIDERSHIP_SCALING_FACTOR

ArcPlan Control Keys (blank)

RIGHT_TURN_PENALTIES_1

The right turn penalty keys are optional and when provided specifies an additional impedance value for lane connections identified as right turns. The values can range from zero to 10000.0. The default value is 0.0 impedance units. This value is added to the impedance of the departure link of a drive path. If household types are defined, this key can include a list of values corresponding to each household type. For example, 0, 100, 200 can be specified to define the right turn penalty for household types 1, 2 and 3+, respectively.

ROUTE_AT_SPECIFIED_TIMES

PathSkim Control Keys (blank)

ROUTE_BY_TIME_INCREMENT

PathSkim Control Keys (blank)

ROUTE_FROM_SPECIFIED_LOCATIONS

PathSkim Control Keys (blank)

ROUTE_FROM_SPECIFIED_ZONES

PathSkim Control Keys (blank)

ROUTE_NODES_FORMAT

System File Keys FILE_FORMAT

ROUTE_TO_SPECIFIED_LOCATIONS

PathSkim Control Keys (blank)

ROUTE_TO_SPECIFIED_ZONES

PathSkim Control Keys (blank)

ROUTE_WITH_SPECIFIED_MODE

PathSkim Control Keys (blank)

ROUTE_WITH_SPECIFIED_USE_TYPE

PathSkim Control Keys (blank)

ROUTE_WITH_TIME_CONSTRAINT

PathSkim Control Keys (blank)

ROUTER_REPORT_1

Router Control Keys (blank)

SAVE_ONLY_SKIMS

Path Building Service Keys Boolean

SELECT_BY_LINK_GROUP

LinkSum Control Keys Boolean

SELECT_DESTINATION_ZONES

Select Service Keys (blank)

SELECT_DESTINATIONS

The select locations parameter enables the user to specify the destination locations that are considered for processing. This parameter is optional. If it is not provided, all destination locations will be considered by the selection process. The location parameter is interpreted as a comma-delimited list of activity location numbers or activity location number ranges. A sequential range of activity locations are specified by providing the first activity location number in the range and the last activity location number in the range separated by two periods (e.g., 47..78). The Plan is selected if the destination of the path is included in the activity location list.

SELECT_END_TIMES

Select Service Keys (blank)

SELECT_FACILITY_TYPES

Select Service Keys (blank)

SELECT_HOUSEHOLDS

Select Service Keys (blank)

SELECT_LINKS_1

The select links parameters enable the user to provide a list of link numbers the plan must include before it is processed. This parameter is optional. If it is not provided, the selection process will consider all plan legs. The '#' at the end of the keyword represents a selection set number (e.g., SELECT_LINKS_1). Any number of selection sets can be specified. If a path satisfies any one of the selection sets, the plan is included.

Each link parameter is interpreted as a comma-delimited list of link numbers or link number ranges. A sequential range of links are specified by providing the first node number in the range and the last link number in the range separated by two periods (e.g., 1000..1010). The path must include all of the links in the list in sequential order in order to be selected. The path may include other links between links included in the list, but it must travel through all of the links in the order specified

SELECT_MODES

This parameter permits the user to select the modes on the trip file to be routed. The key is a comma separated list of the mode codes used in the activity file (1..9). All modes will be routed if the key is “1,2,3,4,5,6,7,8,9”. Only transit trips are routed if the key is “3”

SELECT_NODES_1

The select nodes parameters enable the user to provide a list of node numbers the plan must include before it is processed. This parameter is optional. If it is not provided, the selection process will consider all plan legs. The '#' at the end of the keyword represents a selection set number (e.g., SELECT_NODES_1). Any number of selection sets can be specified. If a path satisfies any one of the selection sets, the plan is included.

Each node parameter is interpreted as a comma-delimited list of node numbers or node number ranges. A sequential range of nodes are specified by providing the first node number in the range and the last node number in the range separated by two periods (e.g., 1000..1010). The path must include all of the nodes in the list in sequential order in order to be selected. The path may include other nodes between nodes included in the list, but it must travel through all of the nodes in the order specified.

SELECT_ORIGIN_ZONES

Select Service Keys (blank)

SELECT_ORIGINS

The select locations parameter enables the user to specify the origin locations that are considered for processing. This parameter is optional. If it is not provided, all origin locations will be considered by the selection process. The location parameter is interpreted as a comma-delimited list of activity location numbers or activity location number ranges. A sequential range of activity locations are specified by providing the first activity location number in the range and the last activity location number in the range separated by two periods (e.g., 47..78). The Plan is selected if the origin of the path is included in the activity location list.

SELECT_PARKING_LOTS

PlanSelect Control Keys (blank)

SELECT_PROBLEM_TYPES

The select problem types key enables the user to select travelers with specified problems from the plan file. This parameter is optional. If it is not provided, the problem types will not be used by the selection process. The types parameter is interpreted as a comma-delimited list of problem type labels. The label options include: PATH_BUILDING, TIME_SCHEDULE, ZERO_NODE, VEHICLE_TYPE, PATH_CIRCUITY, TRAVEL_MODE, VEHICLE_ACCESS, WALK_DISTANCE, WAIT_TIME, WALK_ACCESS, PATH_SIZE, PARK-&-RIDE_LOT, BIKE_DISTANCE, DEPARTURE_TIME, ARRIVAL_TIME, LINK_ACCESS, LANE_CONNECTIVITY, PARKING_ACCESS, LANE_MERGING, LANE_CHANGING, TURNING_SPEED, POCKET_MERGE, VEHICLE_SPACING, TRAFFIC_CONTROL, and ACCESS_RESTRICTION.

SELECT_PURPOSES

Select Service Keys (blank)

SELECT_START_TIMES

Select Service Keys (blank)

SELECT_TIME

ArcNet Control Keys (blank)

SELECT_TIME_RATIOS

The total travel time recorded in the plan file is compared with the cumulative travel time represented by the current link travel times to determine if a household is eligible for re-routing. In essence, the program "re-skims" the travel path for each traveler using the latest link travel times. If the absolute difference is greater than the user-specified criteria (e.g., SELECT_TIME_RATIOS 2), the household is eligible for re-routing.

SELECT_TRAVELER_TYPES

Select Service Keys (blank)

SELECT_VC_RATIOS

A household is eligible for re-routing if one or more of the household members travel through a link with a 15-minute volume-to-capacity ratio greater than the specified criterion (e.g., SELECT_VC_RATIOS 1.2).

SELECT_VEHICLE_TYPES

Select Service Keys (blank)

SELECTION_FORMAT

System File Keys FILE_FORMAT

SELECTION_METHOD

PlanCompare Control Keys (blank)

SELECTION_PERCENTAGE

The selection percentage is optional. If a value is not provided, all of the plans selected by the selection criteria will be considered for output to the household ID file. If a value is provided, it specifies the percentage of the selected households that will be output to the household ID file. A random probability function is used to determine which of the selected households will be written to the output file.

SHAPE_FORMAT

System File Keys FILE_FORMAT

SHARED_LANE_FACTOR_1

IntControl Control Keys (blank)

SIGN_FORMAT

System File Keys FILE_FORMAT

SIGN_SETBACK

Draw Service Keys (blank)

SIGN_SIDE_OFFSET

Draw Service Keys (blank)

SIGNAL_CYCLE_LENGTH_1

IntControl Control Keys (blank)

SIGNAL_DETECTOR_LENGTH_1

IntControl Control Keys (blank)

SIGNAL_FORMAT

System File Keys FILE_FORMAT

SIGNAL_ID_AS_NODE_ID

TransimsNet Control Keys Boolean

SIGNAL_SPLIT_METHOD_1

IntControl Control Keys (blank)

SIGNAL_TIME_BREAKS_1

IntControl Control Keys (blank)

SIGNAL_TYPE_CODE_1

IntControl Control Keys (blank)

SIMULATION_END_TIME

Flow-Time Service Keys (blank)

SIMULATION_START_TIME

Flow-Time Service Keys (blank)

SKIM_FORMAT

System File Keys FILE_FORMAT

SKIM_OD_UNITS

System File Keys (blank)

SKIM_TIME_INCREMENT

System File Keys (blank)

SKIM_TIME_PERIODS

System File Keys (blank)

SKIM_TOTAL_TIME_FLAG

System File Keys Boolean

SKIM_TRAVEL_TIME_FORMAT

System File Keys (blank)

SKIM_TRIP_LENGTH_FORMAT

System File Keys (blank)

SLOW_DOWN_PERCENTAGE_1

Flow-Time Service Keys (blank)

SLOW_DOWN_PROBABILITY_1

Flow-Time Service Keys (blank)

SMOOTH_GROUP_SIZE

Simulation Service Keys (blank)

SNAPSHOT_FORMAT

ArcSnapshot Control Keys FILE_FORMAT

SPEED_DATA_FIELD_NAME

LinkData Control Keys (blank)

SPEED_FACTOR_BY_FACILITY

NetPrep Control Keys (blank)

SPEED_ROUNDING_INCREMENT

NetPrep Control Keys (blank)

SPLIT_LARGE_LOOPS

NetPrep Control Keys Integer

This control key is optional and is disabled by default. The purpose of this key is to resolve a-node = b-node type issues in a network by splitting these loops into two links and adding a node so that vehicles can be loaded onto the links. The value for this key is the distance in meters that represents the minimum loop size to be split. If a value greater than zero is specified for this key, and the loop length is less than this value, the loop is deleted rather than split. In order for this key to work properly, a shape file key must be specified in the control file and the shape file must be located in the corresponding directory location specified by the user or NetPrep will return an error message.

STATION_WAITING_PENALTIES_1

The station waiting penalty is similar to a transfer penalty, but applies to all boardings at a transit stop coded with the “STATION” type. This is typically used to distinguish boardings at a rail station from boardings at a bus stop. The default value is 0.0. The values can range from zero to 100,000 impedance units. If household types are defined, the key can include a list of values corresponding to each household type.

STOP_WAITING_PENALTIES_1

The stop waiting penalty is similar to a transfer penalty, but applies to all boardings at a transit stop coded with the "STOP" type. This is typically used to distinguish boardings at bus stops from boardings at rail stations. The default value is 0.0 impedance units. The values can range from zero to 100,000 impedance units. If household types are defined, this key can include a list of values corresponding to each household type.

STREET_PARKING_WARRANT_1

TransimsNet Control Keys (blank)

SUBZONE_DATA_FIELD_1

LocationData Control Keys (blank)

SUBZONE_DATA_FORMAT_1

LocationData Control Keys FILE_FORMAT

SUBZONE_ZONE_FIELD_1

LocationData Control Keys (blank)

SUMMARY_TIME_INCREMENT

Used for summarizing link delay and other outputs. The default time increment is 15 minutes (900 seconds), with a range of 0, or 2 to 240 minutes. This value can be specified in minutes. The time increment specifies the size of the summary time period. (formerly known as OUTPUT_SUMMARY_INCREMENT)

SUMMARY_TIME_RANGES

Used for summarizing link delay and other outputs. The default time range is ALL (i.e., 0:00..24:00). A range is a comma separated list of start and end time pairs. The time values in each pair are separated by two periods (e.g., 6:30..9:00, 0..97200 seconds, 0.0..27.0 hours, 0:00..27:00). This was formerly known as OUTPUT_SUMMARY_TIME_RANGE in Version 4.

TIME_DISTRIBUTION_FIELD_1

ConvertTrips Control Keys

This key replaces TRIP_TIME_FIELD_* from Version 4. The trip time field is optional and is only processed when a trip time script is not provided. By default, the program selects the third field

in the trip time file as the diurnal distribution values for a given trip group. The user may, however, include multiple diurnal distribution fields in a given trip time file. This key enables the user to specify the field name that contains the diurnal distribution values used for this trip group.

TIME_DISTRIBUTION_FORMAT_1

ConvertTrips Control Keys FILE_FORMAT

TIME_DISTRIBUTION_TYPE_1

ConvertTrips Control Keys

This key replaces TIME_CONTROL_POINT_# from Version 4. This is an optional parameter with a default value of TRIP_START.

The diurnal distribution produced by the trip time file is used to define the probability that a given trip will take place at a given time. The time assigned to a trip is based on the offset of a random number within the cumulative probability distribution. By default, this time value (in seconds) is assumed to be the time at the origin of the trip. This key enables the user to specify how the time value is applied. The options include "TRIP_START", "TRIP_END", and "MID_TRIP".

If "TRIP_END" is selected, the program interprets the diurnal distribution as an arrival time distribution. The start time for the trip is then calculated by subtracting the estimated travel time from the selected arrival time. If "MID-TRIP" is selected, the program interprets the diurnal distribution as a time-in-motion distribution. The start time and the end time for the trip are calculated by subtracting and adding one half of the estimated travel time from the selected mid-trip time. The time control point is saved in the CONSTRAINTS field in the output trip file. The constraint codes are:

0 TRIP_START
1 TRIP_END
2 MID_TRIP

TIME_OF_DAY_FORMAT

Execution Service Keys Text

The time of day format key is optional. The time of day format defines how the time data are written to the output files and reports. The default format will display values in DAY_TIME format (e.g., 0:00:00 to 1@3:00:00 refers to midnight to 3:00 AM the next day). The format options include SECONDS, MINUTES, HOURS, HOUR_CLOCK (e.g., 0:00 to 27:00), DAY_TIME,

and TIME_CODE. Time codes combine a day code with an hour clock (e.g. TUE08:00). Day code options include SUN, MON, TUE, WED, THU, FRI, SAT, WKE, WKD, and ALL.

Examples of each format are as follows:

DAY_TIME: 1@09:39:24.3
SECONDS: 34764.3
MINUTES: 579.4
HOURS: 9.66
HOUR_CLOCK: 09:39
TIME_CODE: TUE08:00

Internally, the DTIME data object is used, with a resolution of tenths of a second. In binary files, this is stored as a 2 or 4 byte integer, in text files, as a character string with approximately 12 characters.

TIME_PERIOD_RANGE_1	**ConvertTrips Control Keys**	(blank)
TIME_PROCESSING_METHOD	**ArcSnapshot Control Keys**	(blank)
TIME_SCHEDULE_CONSTRAINT_1	**ConvertTrips Control Keys**	(blank)
TIME_STEPS_PER_SECOND	**Flow-Time Service Keys**	(blank)
TIMING_PLAN_FORMAT	**System File Keys**	FILE_FORMAT

TITLE

Execution Service Keys Text

This key is optional. Any text string can be used on this line. This text is printed on the top of each output page.

TO_NODE_FIELD_NAME

LinkData Control Keys (blank)

TOUR_HOUSEHOLD_FIELD

The tour household field key is optional. It is the column header (field name) for the household number in the Tour table. A typical value might be HHOLD.

TOUR_PERSON_FIELD

The tour person field key is optional. It is the column header (field name) for the person number in the Tour table. A typical value might be PERSON.

TOUR_NUMBER_FIELD

The tour number field key is optional. It is the column header (field name) for the tour number in the Tour table. A typical value might be TOUR. A person in a household might have several tours over the course of a day. For example, she might travel to work, return home, and then travel again for evening activities.

TOUR_PURPOSE_FIELD

The tour purpose field key is optional. It is the column header (field name) for the tour purpose in the Tour table. A typical value might be PURPOSE.

TOUR_MODE_FIELD

The tour mode field key is optional. It is the column header (field name) for the tour mode in the Tour table. A typical value might be MODE. See the definition of TRAVEL_MODE_CODE_1 for a list of mode codes.

TOUR_ORIGIN_FIELD

The tour origin field key is optional. It is the column header (field name) for the zone where the tour originates in the Tour table. A typical value might be ORIG. ConvertTrips takes this zone, and assigns an activity location within the zone as both the starting and return point of the tour.

TOUR_DESTINATION_FIELD

The tour destination field key is optional. It is the column header (field name) for the zone of the primary destination in the Tour table. A typical value might be DEST.

TOUR_STOP_OUT_FIELD

The tour stop out field key is optional. It is the column header (field name) for the zone of the outbound stop in the Tour between origin and destination. A typical value might be STOP_OUT. Within the column, 0 is used if there is no outbound stop.

TOUR_STOP_IN_FIELD

The tour stop out field key is optional. It is the column header (field name) for the zone of the inbound stop in the Tour between destination and origin. A typical value might be STOP_IN. Within the column, 0 is used if there is no inbound stop.

TOUR_START_FIELD

The tour start field key is optional. It is the column header (field name) for the starting hour of the tour. A typical value might be START_HR.

TOUR_RETURN_FIELD

The tour return field key is optional. It is the column header (field name) for the ending hour of the tour. A typical value might be END_HR.

TOUR_GROUP_FIELD

The tour group field key is optional.

TRAFFIC_CONTROL_WARRANT_1

TransimsNet Control Keys (blank)

TRANSFER_PENALTIES_1

The transfer penalty key is optional and when provided specifies an additional impedance value for transferring from one transit route to another. The value can range from zero to 10000.0. The default value is 0.0. This value is added to the impedance of the access link to the second, third, etc., transit boarding stop.

TRANSFER_WAIT_VALUES_1

The transfer wait value key is optional and when provided specifies the impedance values for time the traveler spends waiting to transfer to another transit vehicle. The values can range from zero to 1000.0. The default value is 20.0 impedance units / second. This value is multiplied by the difference between the time of day when the traveler arrives at a transit stop and the time when the next transit vehicle is scheduled to leave that stop. If household types are defined, this key can include a list of values corresponding to each household type. For example, 20, 25, 30 can be specified to define the transfer wait time value for household types 1, 2 and 3+, respectively.

TRANSIMSNET_REPORT_1

TransimsNet Control Keys (blank)

TRANSIT_DIRECTION_OFFSET

Draw Service Keys (blank)

TRANSIT_DRIVER_FORMAT

System File Keys FILE_FORMAT

TRANSIT_FARE_FORMAT

System File Keys FILE_FORMAT

TRANSIT_OVERLAP_FLAG

Draw Service Keys Boolean

TRANSIT_ROUTE_FORMAT

System File Keys FILE_FORMAT

TRANSIT_SCHEDULE_FORMAT

System File Keys FILE_FORMAT

TRANSIT_STOP_FORMAT

System File Keys FILE_FORMAT

TRANSIT_STOP_SIDE_OFFSET

Draw Service Keys (blank)

TRANSIT_TIME_PERIODS

ArcNet Control Keys (blank)

TRAVEL_MODE_CODE_1

ConvertTrips Control Keys (blank)

The mode, in words (e.g., DRIVE), for the trip.

0 = Wait (transit stops or activities)
1 = Walk
2 = Bicycle
3 = Drive
4 = Ride (auto passenger)
5 = Transit
6 = Park-&-ride outbound
7 = Park-&-ride inbound

8 = Kiss-&-ride outbound
9 = Kiss-&-ride inbound
10 = Taxi
11 = Other (magic move, …)
12 = 2 person carpool (HOV2)
13 = 3 person carpool (HOV3)
14 = 4+ person carpool (HOV4)

TRAVELER_SCALING_FACTOR

NewFormat Control Keys (blank)

TRAVELER_TYPE_CODE_1

ConvertTrips Control Keys (blank)

TRAVELER_TYPE_FACTORS_1

Flow-Time Service Keys (blank)

TRIP_FACTOR_FORMAT_1

ConvertTrips Control Keys FILE_FORMAT

TRIP_FORMAT

System File Keys FILE_FORMAT

TRIP_PRIORITY_CODE_1

ConvertTrips Control Keys (blank)

TRIP_PURPOSE_CODE_1

ConvertTrips Control Keys

The trip purpose code is optional. Any value between 0 and 100 can be specified. The default value is 1. In some applications this value is used to define the relative priority and scheduling flexibility of a given activity. The original TRANSIMS documentation includes the following values as a suggested list of trip purposes or activity types.

0 Home
1 Work
2 Shop
3 Visit
4 Social/Recreation

5 Other
6 Serve Passenger
7 School
8 College

TRIP_SCALING_FACTOR_1

ConvertTrips Control Keys

The optional trip scaling factor key enables the user to factor the input trips by a scaling factor. This could be used to select of subset of the full trip table or grow the trips to a future year estimate. The factor is a floating point number, but the result of applying the factor will be an integer number of trips for each origin-destination pair. A bucket rounding process is applied to minimize the impact of integer rounding as much as possible. The default value is 1.0.

TRIP_SORT_TYPE

Data Service Keys (blank)

TRIP_TABLE_FORMAT_1

ConvertTrips Control Keys FILE_FORMAT

TRIPPREP_REPORT_1

TripPrep Control Keys (blank)

TURN_MOVEMENT_FACTOR_1

IntControl Control Keys (blank)

TURN_NODE_RANGE

LinkSum Control Keys (blank)

TURN_PENALTY_FORMAT

System File Keys FILE_FORMAT

TURN_POCKET_FACTOR

Flow-Time Service Keys (blank)

U_TURN_PENALTIES_1

The U turn penalty keys are optional and when provided specifies an additional impedance value for lane connections identified as U turns. The values can range from zero to 10000.0. The default value is 0.0 impedance units. This value is added to the impedance of the departure link of a drive path. If household types are defined, this key can include a list of values corresponding to each household type. For example, 0, 100, 200 can be specified to define the U turn penalty for household types 1, 2 and 3+, respectively.

UNITS_OF_MEASURE

Execution Service Keys Text

This key is optional and defaults to METRIC. Possible values are ENGLISH (feet) or METRIC (meters). The default distance and speed units included in data files or control keys are assumed to be in METRIC units. This key can be used to specify the units of measure as ENGLISH or METRIC. If a particular key value includes data units, the program will automatically convert the value to the specified units of measure. The standard data files created by the TRANSIMS Version 5 software identify the units associated with each data field in the definition file (*.def).

UNSIMULATED_SUBAREAS

Flow-Time Service Keys (blank)

UPDATE_FLOW_RATES

UPDATE_FLOW_RATES FALSE //---- TRUE/FALSE, YES/NO, 1/0, T/F, Y/N

UPDATE_LINK_RANGE

TransimsNet Control Keys List

The update link range is optional and if specified defines a series of link numbers. The range is a comma separated list of link ranges. A link range is specified using two periods (e.g., 100..200). In update mode, the program reads existing network files and deletes the existing records for the link and adds new records at the end of the file.

UPDATE_NODE_RANGE

TransimsNet Control Keys List

The update node range is optional and if specified defines a series of node numbers where the lane connectivity and traffic control warrants are recalculated. The range is a comma separated list of node ranges. A node range is specified using two periods (e.g., 100..200). In update

mode, the program reads existing network files and deletes the existing records for the node and adds new records at the end of the file.

UPDATE_PLAN_RECORDS

UPDATE_PLAN_RECORDS FALSE //---- TRUE/FALSE, YES/NO, 1/0, T/F, Y/N

UPDATE_TRAVEL_TIMES

UPDATE_TRAVEL_TIMES FALSE //---- TRUE/FALSE, YES/NO, 1/0, T/F, Y/N

UPDATE_TRAVELER_TYPE

TripPrep Control Keys Boolean

UPDATE_TRIP_PARTITIONS

TripPrep Control Keys Boolean

UPDATE_TURNING_MOVEMENTS

This optional flag defaults to FALSE. Possible values are (TRUE/FALSE, YES/NO, 1/0, T/F, Y/N). When true, turning movements are added to the output link delay file when the input link delay file does not include turning movements.

VEHICLE_FORMAT

System File Keys FILE_FORMAT

VEHICLE_PASSENGERS_1

ConvertTrips Control Keys (blank)

VEHICLE_TIME_VALUES_1

The vehicle time value key is optional and when provided specifies the impedance values for time the traveler spends in a vehicle. The values can range from zero to 1000.0. The default value is 10.0 impedance units / second. This value is multiplied by the travel time on each link at the time of day when the traveler's path enters the link or the difference in the schedule time between the boarding and alighting transit stops. If household types are defined, this key can include a list of values corresponding to each household type. For example, 10, 15, 20 can be specified to define the in vehicle time value for household types 1, 2 and 3+, respectively.

VEHICLE_TYPE_CODE_1

ConvertTrips Control Keys (blank)

VEHICLE_TYPE_FORMAT

System File Keys FILE_FORMAT

VERSION4_PLAN_FORMAT

NewFormat Control Keys (blank)

VERSION4_TIME_FORMAT

NewFormat Control Keys (blank)

VOLUME_DATA_FIELD_NAME

LinkData Control Keys (blank)

WALK_ACCESS_TIME_RANGE

LocationData Control Keys (blank)

WALK_PATH_DETAILS

Optional key indicating whether details of the walking path are written are provided. The default value is FALSE. Possible values are TRUE/FALSE, YES/NO, 1/0, T/F, Y/N.

WALK_SPEED

The walk speed is optional and when provided specifies the walking speed in meters per second. The value can range from 0.5 to 10.0 meters per second. The default value is 1.0. Link lengths are divided by this value to convert distance into walk time.

WALK_TIME_VALUES_1

The walk time value key is optional and when provided specifies the impedance value for time the traveler spends walking. The value can range from zero to 1000.0. The default value is 20.0 impedance units / second. This value is multiplied by the time spent walking on network and process links. If household types are defined, this key can include a list of values corresponding to each household type. For example, 15, 20, 25 can be specified to define the bicycle time value for household types 1, 2 and 3+, respectively.

YELLOW_PHASE_TIME_1

IntControl Control Keys (blank)

ZONE_FIELD_NAME

LocationData Control Keys (blank)
TransimsNet Control Keys (blank)

ZONE_FORMAT

System File Keys FILE_FORMAT

ZONE_UPDATE_RANGE

LocationData Control Keys (blank)