TRANSIMS Version 5
File Reference

ACCESS_FILE

Names: ACCESS_FILE and NEW_ACCESS_FILE

Used In:

ArcNet
ConvertTrips Default Control K
LocationData
Microsimulator
NewFormat
PathSkim
Router
TransimsNet Default Control Ke

To be defined

ACTIVITY_FILE

Name: ACTIVITY_FILE

Used In:

NewFormat

To be defined

ARC_ACCESS_FILE

Names: ARC_ACCESS_FILE, NEW_ARC_ACCESS_FILE

Used in ArcNet

To be defined

ARC_ACCESSIBILITY_FILE

Names: ARC_ACCESSIBILITY_FILE, NEW_ARC_ACCESSIBILITY_FILE

Used in ArcPlan

To be defined

ARC_ BANDWIDTH_FILE

Names: ARC_ BANDWIDTH_FILE, NEW_ARC_ BANDWIDTH_FILE

Used in ArcpLAN

To be defined

ARC_CENTERLINE _FILE

Names: ARC_ CENTERLINE _FILE, NEW_ARC_ CENTERLINE _FILE

Used in ArcNet

To be defined

ARC_CONNECTION_FILE

Names: ARC_ CONNECTION _FILE, NEW_ARC_ CONNECTION _FILE

Used in ArcNet

To be defined

ARC_ DETECTOR_FILE

Names: ARC_ DETECTOR _FILE, NEW_ARC_ DETECTOR _FILE

Used in ArcNet

To be defined

ARC_DISTANCE_CONTOUR _FILE

Names: ARC_ DISTANCE_CONTOUR _FILE, NEW_ARC_ DISTANCE_CONTOUR _FILE

Used in ArcPlan

To be defined

ARC_ LANE_USE _FILE

Names: ARC_ LANE_USE _FILE, NEW_ARC_ LANE_USE _FILE

Used in ArcNet

To be defined

ARC_ LINK_FILE

Names: ARC_ LINK _FILE, NEW_ARC_ LINK _FILE

Used in ArcNet

To be defined

ARC_LOCATION _FILE

Names: ARC_ LOCATION _FILE, NEW_ARC_ LOCATION _FILE

Used in ArcNet

To be defined

ARC_ NODE_FILE

Names: ARC_NODE _FILE, NEW_ARC_NODE _FILE

Used in ArcNet

To be defined

ARC_ PARKING_DEMAND_FILE

Names: ARC_ PARKING_DEMAND _FILE, NEW_ARC_ PARKING_DEMAND _FILE

Used in ArcPlan

To be defined

ARC_ PARKING_FILE

Names: ARC_ PARKING _FILE, NEW_ARC_ PARKING _FILE

Used in ArcNet

To be defined

ARC_ PHASING_PLAN _FILE

Names: ARC_ PHASING_PLAN _FILE, NEW_ARC_ PHASING_PLAN _FILE

Used in ArcNet

To be defined

ARC_ PLAN_FILE

Names: ARC_ PLAN_FILE, NEW_ARC_PLAN _FILE

Used in ArcPlan

To be defined

ARC_ POCKET_FILE

Names: ARC_ POCKET_FILE, NEW_ARC_POCKET _FILE

Used in ArcNet

To be defined

ARC_PROBLEM _FILE

Names: ARC_ PROBLEM_FILE, NEW_ARC_PROBLEM _FILE

Used in ArcPlan

To be defined

ARC_RIDERSHIP _FILE

Names: ARC_ RIDERSHIP _FILE, NEW_ARC_ RIDERSHIP _FILE

Used in ArcPlan

To be defined

ARC_ ROUTE_NODES _FILE

Names: ARC_ ROUTE_NODES _FILE, NEW_ARC_ ROUTE_NODES _FILE

Used in ArcNet

To be defined

ARC_ SIGN_FILE

Names: ARC_SIGN _FILE, NEW_ARC_ SIGN_FILE

Used in ArcNet

To be defined

ARC_ SIGNAL _FILE

Names: ARC_ SIGNAL _FILE, NEW_ARC_ SIGNAL _FILE

Used in ArcNet

To be defined

ARC_ SNAPSHOT _FILE

Names: ARC_ SNAPSHOT _FILE, NEW_ARC_ SNAPSHOT _FILE

Used in ArcSnapshot

To be defined

ARC_ STOP_DEMAND _FILE

Names: ARC_ STOP_DEMAND _FILE, NEW_ARC_ STOP_DEMAND _FILE

Used in ArcPlan

To be defined

ARC_ STOP_GROUP _FILE

Names: ARC_ STOP_GROUP _FILE, NEW_ARC_ STOP_GROUP _FILE

Used in ArcPlan

To be defined

ARC_ SUBZONE_DATA _FILE

Names: ARC_ SUBZONE_DATA _FILE, NEW_ARC_ SUBZONE_DATA _FILE

Used in ArcNet

To be defined

ARC_ TIME_CONTOUR _FILE

Names: ARC_ TIME_CONTOUR _FILE, NEW_ARC_ TIME_CONTOUR _FILE

Used in ArcPlan

To be defined

ARC_ TIMING_PLAN _FILE

Names: ARC_ TIMING_PLAN _FILE, NEW_ARC_ TIMING_PLAN _FILE

Used in ArcNet

To be defined

ARC_ TRANSIT_DRIVER _FILE

Names: ARC_ TRANSIT_DRIVER _FILE, NEW_ARC_ TRANSIT_DRIVER _FILE

Used in ArcNet

To be defined

ARC_ TRANSIT_ROUTE _FILE

Names: ARC_ TRANSIT_ROUTE _FILE, NEW_ARC_ TRANSIT_ROUTE _FILE

Used in ArcNet

To be defined

ARC_ TRANSIT_STOP _FILE

Names: ARC_ TRANSIT_STOP _FILE, NEW_ARC_ TRANSIT_STOP _FILE

Used in ArcNet

To be defined

ARC_ TURN_PENALTY _FILE

Names: ARC_ TURN_PENALTY _FILE, NEW_ARC_ TURN_PENALTY _FILE

Used in ArcNet

To be defined

ARC_ ZONE _FILE

Names: ARC_ ZONE _FILE, NEW_ARC_ ZONE _FILE

Used in ArcNet

To be defined

COMPARE_PERFORMANCE_FILE

Used in LinkSum

To be defined

COMPARE_PLAN_FILE

Used in PlanCompare

To be defined

CONNECTION_FILE

Names: CONNECTION_FILE, NEW_CONNECTION_FILE

Used In:

- ArcNet
- ArcPlan
- ArcSnapshot
- IntControl
- LinkDelay
- LinkSum
- Microsimulator
- NewFormat
- PathSkim
- PlanSelect
- PlanSum
- Router
- TransimsNet

Formerly known as lane_connectivity, this is a list of intersection connections in the network. A typical field definition (.def) file is as follows:

TRANSIMS50, TAB_DELIMITED, 1
LINK, INTEGER, 1, 10
DIR, INTEGER, 2, 1
TO_LINK, INTEGER, 3, 10
LANES, STRING, 4, 8, LANE_RANGE_TYPE
TO_LANES, STRING, 5, 8, LANE_RANGE_TYPE
TYPE, STRING, 6, 8, CONNECTION_TYPE
PENALTY, UNSIGNED, 7, 5, IMPEDANCE
SPEED, DOUBLE, 8, 5.1, KPH
CAPACITY, UNSIGNED, 9, 8, VPH
NOTES, STRING, 10, 128

The fields are defined as follows:

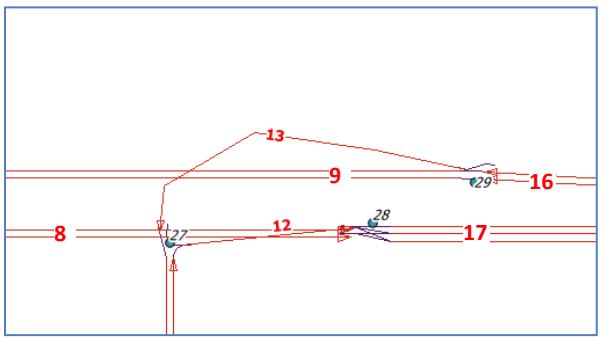
Table 1 Fields in the Connection File

Field(s)	Description	Use	Default Units
LINK	The link number (an integer)	Key	
DIR	Direction on the link AB=0, BA=1	Req.	
TO_LINK	Outbound Link	Req.	
LANES	Range of inbound lanes, numbered from right to left	Req.	Note 1
TO_LANES	Range of outbound lanes, numbered from right to left	Req.	Note 1
TYPE	Connection Type	Req.	Note 2
PENALTY	Penalty for the movement	Opt.	Seconds
SPEED	Maximum turning speed	Opt.	m/s
CAPACITY	Hourly vehicle capacity for the turn	Opt.	veh/hr
NOTES	Character string for user notes	Opt.	

Note 1: Could either be a single lane number, or a range, e.g., 1..2

Note 2: Connection types include NO_TYPE, THRU, R_SPLIT, L_SPLIT, R_MERGE, L_MERGE, RIGHT, LEFT, UTURN

The following figure and table shows some examples.



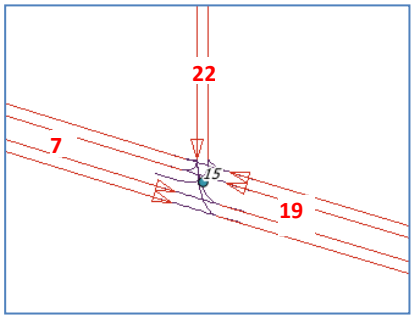


Table 2 Example Connections

LINK	DIR	TO_LINK	LANES	TO_LANES	TYPE	PENALTY	SPEED	CAPACITY	NOTES
16	0	13	R1	1	R_SPLIT	0	0	0	Off Ramp
16	0	9	1..2	1..2	THRU	0	0	0	Thru lanes at off ramp
8	0	17	1..2	1..3	THRU	0	0	0	Thru lanes at on ramp
12	0	17	1	1..2	R_MERGE	0	0	0	On ramp
7	0	19	1..2	1..2	THRU	0	0	0	Eastbound thru lanes
7	0	22	L1	1	LEFT	0	0	0	Eastbound left turn
19	1	22	1	1	RIGHT	0	0	0	Westbound right turn
19	1	7	1..2	1..2	THRU	0	0	0	Westbound thru lanes
22	1	7	1	1..2	RIGHT	0	0	0	Southbound right turn
22	1	19	1	1..2	LEFT	0	0	0	Southbound left turn

Differences from Version 4

Lane numbering has changed significantly from version 4. In version 5, lanes are numbered from right to left, and pocket lanes are treated separately.

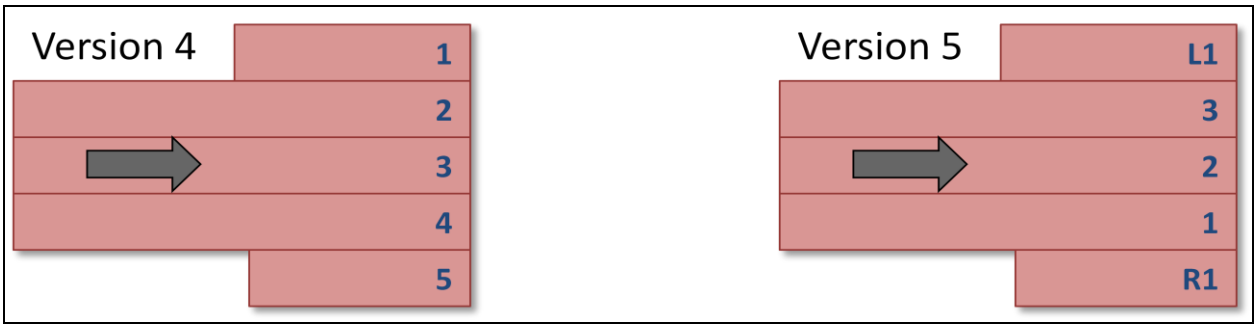


Figure 1 Lane Number Difference Between V4 and V5

This simplifies the lane connectivity edits. In version 4, the edits would often cascade from one intersection to another.

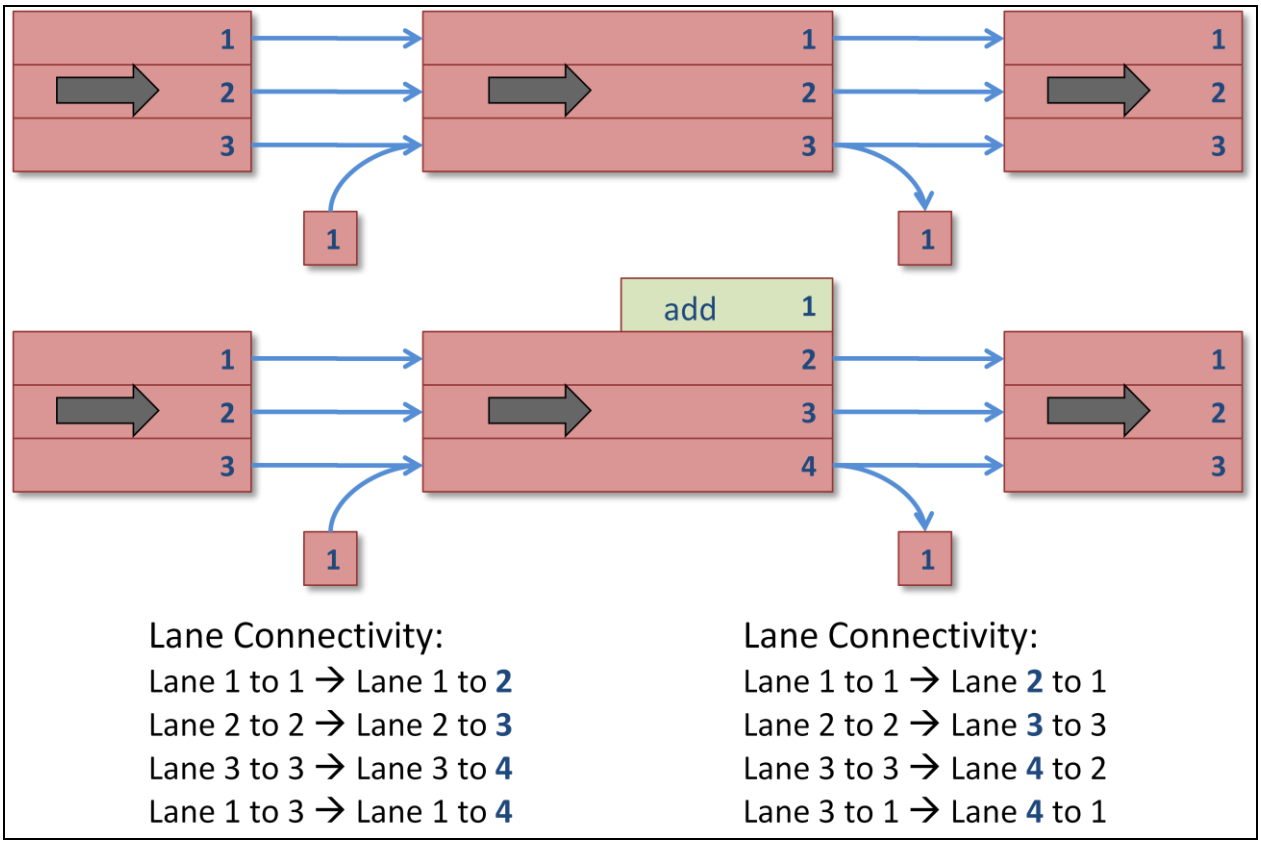


Figure 2 Version 4 Lane Connectivity Edits

In version 5, the edits are simpler:

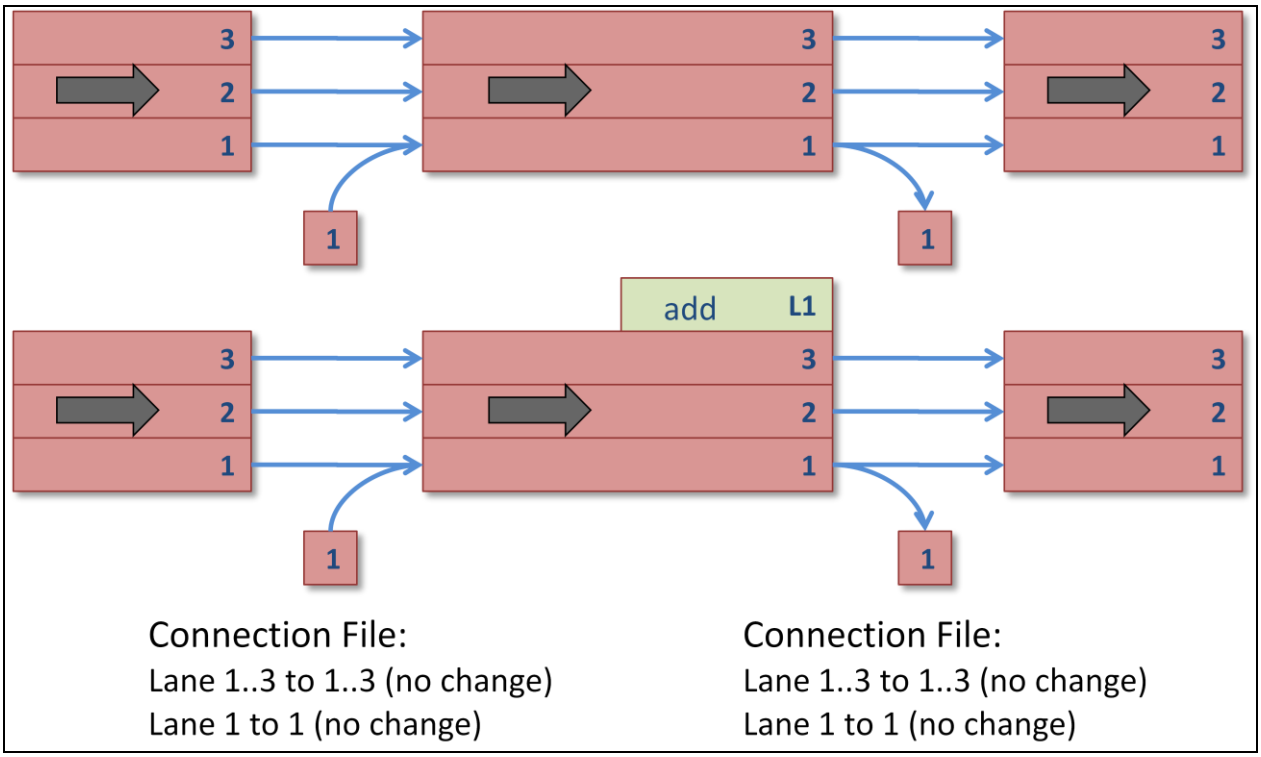


Figure 3 Version 5 Connection Edits

COST_DISTRIBUTION_FILE

NEW_COST_DISTRIBUTION_FILE

PlanCompare

DELETE_LINK_FILE

DELETE_LINK_FILE

NetPrep

TransimsNet Default Control Ke

DELETE_NODE_CONTROL_FILE

DELETE_NODE_CONTROL_FILE

IntControl Default Control Key

DELETE_NODE_FILE

DELETE_NODE_FILE

NetPrep

TransimsNet Default Control Ke

DESTINATION_LOCATION_FILE

DESTINATION_LOCATION_FILE
- PathSkim

NEW_DESTINATION_LOCATION_FILE
- PathSkim

DESTINATION_ZONE_FILE

DESTINATION_ZONE_FILE
- PathSkim

DETECTOR_FILE

DETECTOR_FILE
- ArcNet
- IntControl Default Control Key
- Microsimulator
- NewFormat

NEW_DETECTOR_FILE
- IntControl Default Control Key
- NewFormat

DIRECTIONAL_DATA_FILE

DIRECTIONAL_DATA_FILE
- LinkData

NEW_DIRECTIONAL_DATA_FILE
- LinkData

GROUP_TRAVEL_FILE

NEW_GROUP_TRAVEL_FILE
- LinkSum

HOUSEHOLD_FILE

HOUSEHOLD_FILE
- ConvertTrips Default Control K
- Microsimulator
- NewFormat
- PathSkim
- RandomSelect Default Control K
- Router

NEW_HOUSEHOLD_FILE
- ConvertTrips Default Control K
- NewFormat

INPUT_LINK_FILE

INPUT_LINK_FILE

NetPrep

INPUT_NODE_FILE

INPUT_NODE_FILE

NetPrep

INPUT_SIGN_FILE

INPUT_SIGN_FILE

IntControl Default Control Key

INPUT_SIGNAL_FILE

INPUT_SIGNAL_FILE

IntControl Default Control Key

INPUT_SPDCAP_FILE

INPUT_SPDCAP_FILE

NetPrep

INPUT_ZONE_FILE

INPUT_ZONE_FILE

NetPrep

KEEP_LINK_FILE

KEEP_LINK_FILE

NetPrep

KEEP_NODE_FILE

KEEP_NODE_FILE

NetPrep

LANE_USE_FILE

LANE_USE_FILE

ArcNet
IntControl Default Control Key
LinkSum
Microsimulator

NewFormat
PathSkim
PlanSelect
PlanSum
Router

NEW_LANE_USE_FILE

NewFormat

LINK_ACTIVITY_FILE

NEW_LINK_ACTIVITY_FILE

LinkSum

LINK_DATA_FILE

NEW_LINK_DATA_FILE

LinkData

LINK_DELAY_FILE

LINK_DELAY_FILE

ArcPlan
IntControl Default Control Key
LinkDelay
NewFormat
PathSkim
PlanSelect
PlanSum
Router

NEW_LINK_DELAY_FILE

LinkDelay
NewFormat
PathSkim
PlanSum
Router

LINK_DETAIL_FILE

NEW_LINK_DETAIL_FILE

NetPrep

LINK_EQUIVALENCE_FILE

LINK_EQUIVALENCE_FILE

LinkSum
PlanSum

LINK_FILE

Names: LINK_FILE, NEW_LINK_FILE

Used In:

- ArcNet
- ArcPlan
- ArcSnapshot
- ConvertTrips
- IntControl
- LinkDelay
- LinkSum
- LocationData
- Microsimulator
- NetPrep
- NewFormat
- PathSkim
- PlanSelect
- PlanSum
- ProblemSelect
- Router
- TransimsNet

This is a list of links in the network. A typical field definition (.def) file is as follows:

```
TRANSIMS50, TAB_DELIMITED, 1
LINK, INTEGER, 1, 10
NAME, STRING, 2, 40
NODE_A, INTEGER, 3, 10
NODE_B, INTEGER, 4, 10
LENGTH, DOUBLE, 5, 8.1, METERS
SETBACK_A, DOUBLE, 6, 5.1, METERS
SETBACK_B, DOUBLE, 7, 5.1, METERS
BEARING_A, INTEGER, 8, 4, DEGREES
BEARING_B, INTEGER, 9, 4, DEGREES
TYPE, STRING, 10, 12, FACILITY_TYPE
DIVIDED, UNSIGNED, 11, 1
AREA_TYPE, UNSIGNED, 12, 3
GRADE, DOUBLE, 13, 5.1, PERCENT
LANES_AB, UNSIGNED, 14, 2
SPEED_AB, DOUBLE, 15, 5.1, KPH
FSPD_AB, DOUBLE, 16, 5.1, KPH
CAP_AB, UNSIGNED, 17, 8, VPH
LANES_BA, UNSIGNED, 18, 2
```

SPEED_BA, DOUBLE, 19, 5.1, KPH
FSPD_BA, DOUBLE, 20, 5.1, KPH
CAP_BA, UNSIGNED, 21, 8, VPH
USE, STRING, 22, 128, USE_TYPE
NOTES, STRING, 23, 128

The fields are defined as follows:

Table 3 Fields in the Link File

Field(s)	Description	Use	Default Units
LINK	The link number (an integer)	Key	
NAME	Typically, the name of the street	Opt.	
NODE_A	The node at one end of the link (an integer)	Req.	
NODE_B	The node at the other end of the link (an integer)	Req.	
LENGTH	Length of the link	Req.	m
SETBACK_A, SETBACK_B	When the link is drawn, the setback from each end to its corresponding node	Opt.	m
BEARING_A	Compass direction entering the link at the A end	Opt.	Degrees
BEARING_B	Compass direction exiting the link at the B end	Opt.	Degrees
TYPE	Facility type (functional classification) of the link	Req.	Note 1
DIVIDED	Is it a divided highway?	Opt.	
AREA_TYPE			
GRADE	Percent grade from A to B	Opt.	Pct.
LANES_AB, LANES_BA	Number of thru lanes in the indicated direction. For a one-way link going from A to B, LANES_BA = 0	Req.	
SPEED_AB, SPEED_BA	Speed limit in the indicated direction	Opt.	m/s
FSPD_AB, FSPD_BA	Free flow speed in the indicated direction	Opt.	m/s
CAP_AB, CAP_BA	Hourly vehicle capacity in the indicated direction (used for Volume / Capacity functions)	Opt.	veh/hr
USE	Vehicle types, modes, or use types permitted on the link	Req.	Note 2
NOTES	Character string for user notes	Opt.	

Note 1: Facility types include FREEWAY, EXPRESSWAY, PRINCIPAL, MAJOR, MINOR, COLLECTOR, LOCAL_THRU, LOCAL, FRONTAGE, RAMP, BRIDGE, TUNNEL, OTHER, WALKWAY, BIKEWAY, BUSWAY, LIGHTRAIL, HEAVYRAIL, FERRY, EXTERNAL

Note 2: Uses include ANY, WALK, BIKE, CAR, TRUCK, BUS, RAIL, SOV, HOV2, HOV3, HOV4, LIGHTTRUCK, HEAVYTRUCK, TAXI, RESTRICTED

Figure 1 and Table 2 illustrate a small example. Here, links 8 and 9 are freeway links, link 11 is a minor arterial, and links 12 and 13 are ramps. Typically, limited access roads are represented with separate links for each direction of travel, while other roads have a single link for both directions of travel (even if the road is divided).

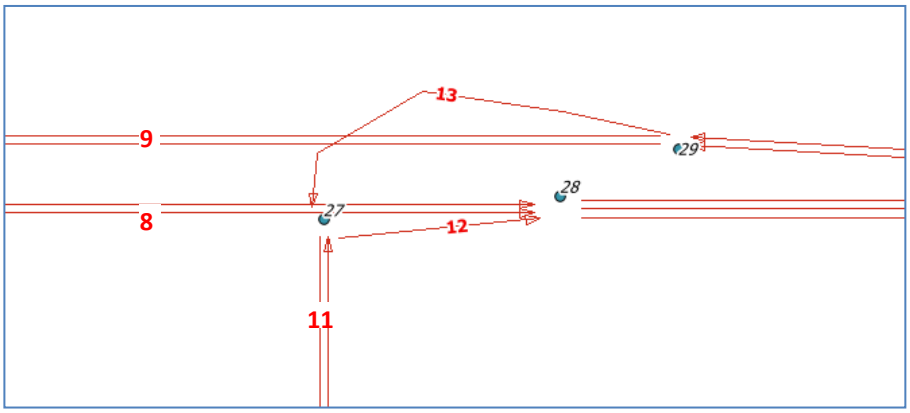


Figure 4 Example Links

Table 4 Example Links

LINK	NAME	NODE_A	NODE_B	LENGTH	SETBACK_A	SETBACK_B	BEARING_A	BEARING_B	TYPE	DIVIDED	AREA_TYPE	GRADE
8	0	24	28	1650	9.1	9.1	90	90	FREEWAY	0	2	0
9	0	29	21	1650	7.5	7.5	270	270	FREEWAY	0	2	0
11	0	16	27	1000	9.1	7.5	0	0	MINOR	0	2	0
12	0	27	28	110	7.5	9.1	84	84	RAMP	0	2	0
13	0	29	27	300	7.5	7.5	282	207	RAMP	0	2	0

Table 2 (continued) Example Links

LINK	LANES_AB	SPEED_AB	FSPD_AB	CAP_AB	LANES_BA	SPEED_BA	FSPD_BA	CAP_BA	USE	NOTES
8	2	97	96	4000	0	0	0	0	AUTO|TRUCK|BUS	
9	2	97	96	4000	0	0	0	0	AUTO|TRUCK|BUS	
11	1	43	43	800	1	43	43	800	AUTO|TRUCK|BUS	
12	1	72	71	1000	0	0	0	0	AUTO|TRUCK|BUS	
13	1	72	72	1000	0	0	0	0	AUTO|TRUCK|BUS	

LINK_NODE_LIST_FILE

LINK_NODE_LIST_FILE
LinkData
NEW_LINK_NODE_LIST_FILE
NetPrep

LINK_SUMMARY_FILE

NEW_LINK_SUMMARY_FILE
ArcSnapshot Default Control Ke

LINK_VOLUME_FILE

NEW_LINK_VOLUME_FILE
PlanSum

LOCATION_FILE

LOCATION_FILE
ArcNet
ArcPlan
ConvertTrips Default Control K
LinkSum
LocationData
Microsimulator
NewFormat
PathSkim
PlanSelect
ProblemSelect Default Control
Router
TransimsNet Default Control Ke
NEW_LOCATION_FILE
LocationData
NewFormat
TransimsNet Default Control Ke

MERGE_LINK_DELAY_FILE

MERGE_LINK_DELAY_FILE
LinkDelay

MERGE_PLAN_FILE

MERGE_PLAN_FILE

PlanPrep

MERGE_TRIP_FILE

MERGE_TRIP_FILE

TripPrep

NODE_FILE

Names: NODE_FILE, NEW_NODE_FILE

Used In:

ArcNet
ArcPlan
ArcSnapshot
ConvertTrips
IntControl
LinkDelay
LinkSum
LocationData
Microsimulator
NetPrep
NewFormat
PathSkim
PlanSelect
PlanSum
ProblemSelect
Router
TransimsNet

This is a list of nodes in the network. A typical field definition (.def) file is as follows:

TRANSIMS50, TAB_DELIMITED, 1
NODE, INTEGER, 1, 10
X_COORD, DOUBLE, 2, 14.1, METERS
Y_COORD, DOUBLE, 3, 14.1, METERS
Z_COORD, DOUBLE, 4, 14.1, METERS
SUBAREA, INTEGER, 5, 4
NOTES, STRING, 6, 128

Essential information includes the node number (an integer) and the X and Y coordinates. These are typically UTM coordinates.

A new field, not in version 4, is the subarea.

Node numbers do not have to be consecutive. However, for external links (zone connectors), the TransimsNet program assumes that the lower node number attached to a zone connector represents

the external station zone number. The simplest way to meet this requirement is to assign numbers higher than the highest external zone number all nodes that are NOT associated with zone centroids (internal or external). For example, if the internal zones are in the range 1 – 500, and external zone numbers are in 600 - 620, the non-centroid nodes might be given node numbers of 700 or higher.

An example of a node file appears below:

NODE	X_COORD	Y_COORD	Z_COORD	SUBAREA	NOTES
600	180054.9	4768512.4	0.0	0	External Node
601	179481.0	4767920.0	0.0	0	External Node
602	179397.8	4767815.8	0.0	0	External Node
3802	179740.0	4767650.0	0.0	0	Subarea Node
3803	180724.8	4766966.0	0.0	0	Subarea Node
3808	178366.1	4768820.6	0.0	0	Subarea Node
4660	179865.9	4767545.0	0.0	0	Subarea Node
4665	179620.0	4767750.0	0.0	0	Subarea Node
8819	179705.0	4767730.0	0.0	0	Subarea Node
9511	179685.0	4767705.0	0.0	0	Subarea Node

OCCUPANCY_FILE

OCCUPANCY_FILE
ArcSnapshot Default Control Ke

ORIGIN_LOCATION_FILE

NEW_ORIGIN_LOCATION_FILE
PathSkim
ORIGIN_LOCATION_FILE
PathSkim

ORIGIN_ZONE_FILE

ORIGIN_ZONE_FILE
PathSkim

PARKING_FILE

NEW_PARKING_FILE
NewFormat
TransimsNet Default Control Ke
PARKING_FILE
ArcNet
ArcPlan
ConvertTrips Default Control K

Microsimulator
NewFormat
PathSkim
Router
TransimsNet Default Control Ke

PARKING_PENALTY_FILE

PARKING_PENALTY_FILE
Microsimulator
PathSkim
Router

PERFORMANCE_DATA_FILE

NEW_PERFORMANCE_DATA_FILE
LinkSum

PERFORMANCE_FILE

NEW_PERFORMANCE_FILE
NewFormat
PERFORMANCE_FILE
ArcPlan
LinkSum
NewFormat

PERSON_FILE

PERSON_FILE
NewFormat

PHASING_PLAN_FILE

NEW_PHASING_PLAN_FILE
IntControl Default Control Key
NewFormat
PHASING_PLAN_FILE
ArcNet
IntControl Default Control Key
Microsimulator
NewFormat

PLAN_FILE

NEW_PLAN_FILE
NewFormat

PathSkim
PlanCompare
PlanPrep
PlanSelect
Router

PLAN_FILE

ArcPlan
Microsimulator
NewFormat
PlanCompare
PlanPrep
PlanSelect
PlanSum
Router

POCKET_FILE

Names: POCKET_FILE, NEW_ POCKET_FILE

Used In:

ArcNet
ArcPlan
ArcSnapshot
IntControl
Microsimulator
NewFormat
PathSkim
Router
TransimsNet

This is a list of pocket lanes in the network. A typical field definition (.def) file is as follows:

TRANSIMS50, TAB_DELIMITED, 1
LINK, INTEGER, 1, 10
DIR, INTEGER, 2, 1
TYPE, STRING, 3, 12, POCKET_TYPE
LANES, UNSIGNED, 4, 2
LENGTH, DOUBLE, 5, 8.1, METERS
OFFSET, DOUBLE, 6, 8.1, METERS
NOTES, STRING, 7, 128
The fields are defined as follows:

Table 5 Fields in the Pocket File

Field(s)	Description	Use	Default Units
LINK	The link number (an integer)	Key	
DIR	Direction of the link AB=0, BA=1	Opt.	
TYPE		Req.	Note 1
LANES		Req.	
LENGTH	Length of the pocket	Req.	m
OFFSET		Req.	m
NOTES	Character string for user notes	Opt.	

Note 1: Pocket types include LEFT_TURN, RIGHT_TURN, LEFT_MERGE, RIGHT_MERGE, POCKET_LANE, AUX_LANE

Figure 1 and Table 2 illustrate a small example.

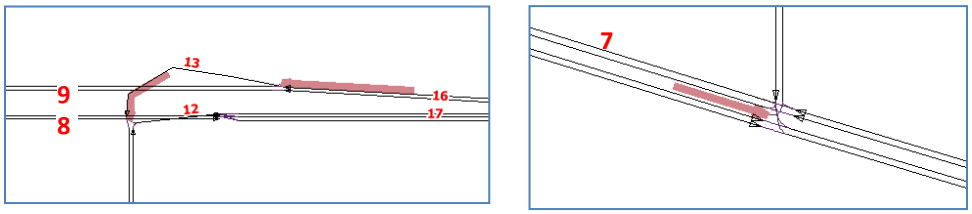


Figure 5 Example Pockets

Table 6 Example Pockets

LINK	DIR	TYPE	LANES	LENGTH	OFFSET	NOTES
7	0	LEFT_TURN	1	50.0	0.0	Left Turn Lane
13	0	LEFT_TURN	1	100.0	0.0	Left Turn Lane
16	0	RIGHT_TURN	1	200.0	0.0	Pocket Lane for Right off-ramp

PROBLEM_FILE

NEW_PROBLEM_FILE
- Microsimulator
- NewFormat
- PathSkim
- Router

PROBLEM_FILE
- ArcPlan
- NewFormat
- ProblemSelect Default Control

REPORT_FILE

REPORT_FILE
- ArcNet
- ArcPlan
- ArcSnapshot Default Control Ke
- ConvertTrips Default Control K
- FileFormat Default Control Key
- IntControl Default Control Key
- LinkData
- LinkDelay
- LinkSum
- LocationData
- Microsimulator
- NetPrep
- NewFormat
- PathSkim
- PlanCompare
- PlanPrep
- PlanSelect
- PlanSum
- ProblemSelect Default Control
- RandomSelect Default Control K
- Router
- TransimsNet Default Control Ke
- TripPrep

RIDERSHIP_FILE

NEW_RIDERSHIP_FILE
- NewFormat

RIDERSHIP_FILE
- NewFormat

ROUTE_NODES_FILE

NEW_ROUTE_NODES_FILE
- NewFormat

ROUTE_NODES_FILE
- ArcNet

SELECTION_FILE

NEW_SELECTION_FILE
- NewFormat
- PlanCompare
- PlanSelect
- ProblemSelect Default Control

RandomSelect Default Control K

SELECTION_FILE

ArcPlan
NewFormat
PathSkim
PlanCompare
PlanPrep
PlanSum
ProblemSelect Default Control
Router
TripPrep

SHAPE_FILE

Names: SHAPE_FILE, NEW_SHAPE_FILE

Used In:

ArcNet
ArcPlan
ArcSnapshot
ConvertTrips
IntControl
LocationData
NetPrep
NewFormat
TransimsNet

This is the name of the TRANSIMS shape file within the network directory, which provides plain text lists of shape points for links in the network. The full path and name for the shape file is constructed by appending the value of this key to the value of the PROJECT_DIRECTORY key.

A typical field definition (.def) file is as follows:

TRANSIMS50, TAB_DELIMITED, 2, NESTED
LINK, INTEGER, 1, 10
POINTS, INTEGER, 2, 4, NEST_COUNT
NOTES, STRING, 3, 128
X_COORD, DOUBLE, 1, 14.1, FEET, NESTED
Y_COORD, DOUBLE, 2, 14.1, FEET, NESTED

An example of a shape file appears below. The first line contains the link number and the number of shape points (n) for that link. The next n lines contain the X and Y coordinates of the shape points. The process is then repeated for the next link:

62 10
6532.8 7935.0
6497.4 7870.7
6439.3 7832.0
6361.9 7822.2
6287.7 7838.2
6226.4 7883.5
6197.5 7938.3
6200.4 7996.4
6235.9 8070.5
6310.4 8109.2
63 11
6816.6 8115.8
6880.9 8093.2
6922.9 8044.6
6948.8 7977.0
6942.2 7912.7
6903.5 7854.6
6842.2 7815.9
6768.0 7802.8
6684.4 7822.2
6632.5 7870.7
6587.6 7935.0

Table 1 Information for links 62 and 63

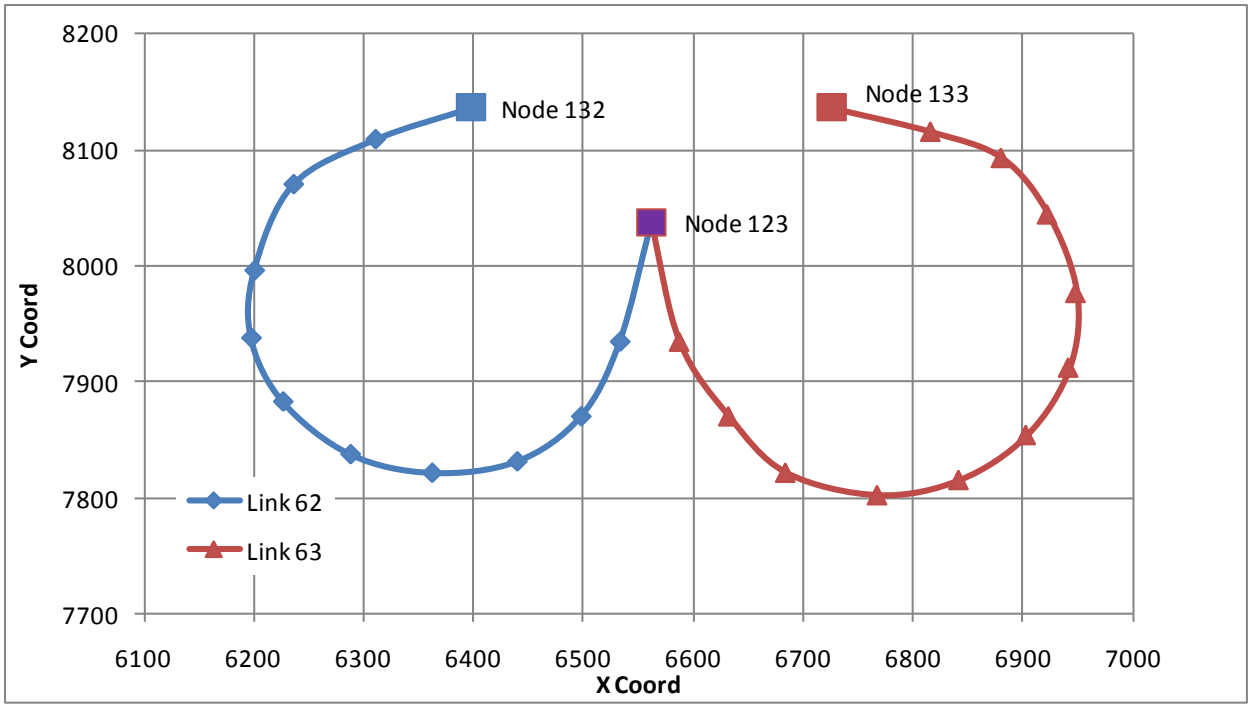
Link	Node A	Node B	Length	Bearing A	Bearing B	Type
62	123	132	656.2	196	73	RAMP
63	133	123	656.2	103	346	RAMP

Table 2 Information for nodes 123, 132, 133

Node	X_Coord	Y_Coord
123	6561.7	8038
132	6397.6	8136.5
133	6725.7	8136.5

This file indicates that link 62 and link 63 should be drawn as follows: Start at Node A for the link, go through the points in the shape file, end at Node B.

The link file indicates that link 62 runs from node 123 to 132, and that link 63 runs from node 133 to 123. The node file gives the location of these nodes. The end result is as follows (part of a cloverleaf freeway interchange):



Normally, TRANSIMS shape files are not created by hand, but are generated from ArcView shapefiles by programs such as GISNet. However, it might be necessary to clean-up a TRANSIMS shapefile by hand. In this case shape points are added, deleted or corrected. The total number of shapepoints for the link must then also be checked and updated.

Although shapefiles are not absolutely necessary to run TRANSIMS, they are helpful for two reasons:

1. They enable a more realistic depiction of the network in a GIS
2. They ensure that TRANSIMSNet has the correct connection angles between links when generating connections within a network

SIGN_FILE

NEW_SIGN_FILE
IntControl Default Control Key
NewFormat
TransimsNet Default Control Ke
SIGN_FILE
ArcNet
IntControl Default Control Key
Microsimulator
NewFormat
TransimsNet Default Control Ke

SIGNAL_FILE

NEW_SIGNAL_FILE
IntControl Default Control Key

NewFormat
TransimsNet Default Control Ke

SIGNAL_FILE

ArcNet
IntControl Default Control Key
Microsimulator
NewFormat
TransimsNet Default Control Ke

SKIM_FILE

NEW_SKIM_FILE

NewFormat
PathSkim

SKIM_FILE

ConvertTrips Default Control K
NewFormat

SNAPSHOT_FILE

NEW_SNAPSHOT_FILE

ArcSnapshot Default Control Ke
NewFormat

SNAPSHOT_FILE

ArcSnapshot Default Control Ke
NewFormat

STOP_EQUIVALENCE_FILE

STOP_EQUIVALENCE_FILE

ArcPlan
PlanSum

SUBZONE_DATA_FILE

SUBZONE_DATA_FILE

ArcNet

SUBZONE_ZONE_FACTOR_FILE

SUBZONE_ZONE_FACTOR_FILE

LocationData

TIME_DISTRIBUTION_FILE

NEW_TIME_DISTRIBUTION_FILE

PlanCompare

TIMING_PLAN_FILE

NEW_TIMING_PLAN_FILE
- IntControl Default Control Key
- NewFormat

TIMING_PLAN_FILE
- ArcNet
- IntControl Default Control Key
- Microsimulator
- NewFormat

TOLL_FILE

TOLL_FILE
- NewFormat

TRANSIT_DRIVER_FILE

NEW_TRANSIT_DRIVER_FILE
- NewFormat

TRANSIT_DRIVER_FILE
- ArcNet
- ArcPlan
- Microsimulator
- NewFormat

TRANSIT_FARE_FILE

NEW_TRANSIT_FARE_FILE
- NewFormat

TRANSIT_FARE_FILE
- Microsimulator
- NewFormat
- PathSkim
- Router

TRANSIT_PENALTY_FILE

TRANSIT_PENALTY_FILE
- Microsimulator
- PathSkim
- Router

TRANSIT_ROUTE_FILE

NEW_TRANSIT_ROUTE_FILE
- NewFormat

TRANSIT_ROUTE_FILE
- ArcNet
- ArcPlan
- LocationData
- Microsimulator
- NewFormat
- PathSkim
- Router

TRANSIT_SCHEDULE_FILE

NEW_TRANSIT_SCHEDULE_FILE
- NewFormat

TRANSIT_SCHEDULE_FILE
- ArcNet
- LocationData
- Microsimulator
- NewFormat
- PathSkim
- Router

TRANSIT_STOP_FILE

NEW_TRANSIT_STOP_FILE
- NewFormat

TRANSIT_STOP_FILE
- ArcNet
- ArcPlan
- LocationData
- Microsimulator
- NewFormat
- PathSkim
- Router

TRIP_COST_GAP_FILE

NEW_TRIP_COST_GAP_FILE
- PlanCompare

TRIP_FILE

NEW_TRIP_FILE
- ConvertTrips Default Control K
- NewFormat
- TripPrep

TRIP_FILE
- ConvertTrips Default Control K

NewFormat
RandomSelect Default Control K
Router
TripPrep

TRIP_TIME_FILE

NEW_TRIP_TIME_FILE
PlanSum

TRIP_TIME_GAP_FILE

NEW_TRIP_TIME_GAP_FILE
PlanCompare

TURN_PENALTY_FILE

NEW_TURN_PENALTY_FILE
NewFormat
TransimsNet Default Control Ke
TURN_PENALTY_FILE
ArcNet
Microsimulator
NewFormat
PathSkim
Router
TransimsNet Default Control Ke

TURN_VOLUME_FILE

NEW_TURN_VOLUME_FILE
LinkSum
TURN_VOLUME_FILE
IntControl Default Control Key

UPDATE_LINK_FILE

UPDATE_LINK_FILE
TransimsNet Default Control Ke

UPDATE_NODE_FILE

UPDATE_NODE_FILE
TransimsNet Default Control Ke

VEHICLE_FILE

NEW_VEHICLE_FILE
- ConvertTrips Default Control K
- NewFormat

VEHICLE_FILE
- ConvertTrips Default Control K
- Microsimulator
- NewFormat
- PathSkim
- Router

VEHICLE_TYPE_FILE

NEW_VEHICLE_TYPE_FILE
- NewFormat

VEHICLE_TYPE_FILE
- ArcNet
- ArcSnapshot Default Control Ke
- ConvertTrips Default Control K
- Microsimulator
- NewFormat
- PathSkim
- Router

VERSION4_PLAN_FILE

VERSION4_PLAN_FILE
- NewFormat

ZONE_BOUNDARY_FILE

ZONE_BOUNDARY_FILE
- LocationData
- TransimsNet Default Control Ke

ZONE_EQUIVALENCE_FILE

ZONE_EQUIVALENCE_FILE
- ConvertTrips Default Control K
- LinkSum
- PathSkim
- PlanSum

ZONE_FILE

Names: ZONE_FILE, NEW_ZONE_FILE

Used In:

- ArcNet
- ConvertTrips
- LocationData
- NetPrep
- NewFormat
- PathSkim
- TransimsNet

The TRANSIMS zone file provides a list of zones in the network. The full path and file name for the zone table is constructed by appending the value of this key to the value of the PROJECT_DIRECTORY key.

A typical field definition (.def) file is as follows:

TRANSIMS50, TAB_DELIMITED, 1
ZONE, INTEGER, 1, 10
X_COORD, DOUBLE, 2, 14.1, FEET
Y_COORD, DOUBLE, 3, 14.1, FEET
Z_COORD, DOUBLE, 4, 14.1, FEET
AREA_TYPE, INTEGER, 5, 3
NOTES, STRING, 6, 128

Essential information includes the zone number (an integer) and the X and Y coordinates. These are typically UTM coordinates.

Zone numbers do not have to be consecutive. However, external zones are typically assigned higher numbers than internal zones.

An example of a zone file appears below:

ZONE	X_COORD	Y_COORD	Z_COORD	AREA_TYPE	NOTES
1	4921.3	14763.8	0.0	2	Internal Zone
2	8202.1	14763.8	0.0	2	Internal Zone
20	6561.7	17060.3	0.0	0	External Zone
21	9842.5	17060.3	0.0	0	External Zone

ZONE_LOCATION_MAP_FILE

NEW_ZONE_LOCATION_MAP_FILE

LocationData

ZONE_LOCATION_MAP_FILE

ConvertTrips Default Control K
PathSkim

ZONE_TRAVEL_FILE

NEW_ZONE_TRAVEL_FILE

LinkSum