ArcPlan Quick Reference

Version 4.0.21

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

Syntax:

ArcPlan [-flag] [control_file] [partition]

Purpose:

1. Create ArcView shapefiles showing the paths from selected records in TRANSIMS plan files.
2. Use the Microsimulator problem file to select problem plans and draw ArcView shapefiles for the problem locations.
3. Create shapefiles showing the vehicle demand on links from selected plans as a bandwidth plot.
4. Create shapefiles showing travel time contours from a given origin to all destinations.
5. Create shapefiles showing trip length contours from a given origin to all destinations.
6. Create shapefiles showing the travel time and trip distance from a given origin to all activity locations.
7. Create shapefiles summarizing the transit ridership on network link segments as polylines or ridership bandwidths.
8. Create shapefiles summarizing the transit boardings and alightings at selected transit stops.
9. Create shapefiles aggregating the transit boardings and alightings from groups of transit stops.
10. Create shapefiles summarizing the vehicle arrivals and departures at selected parking lots.

Required Keys

PLAN_FILE	[project_directory]*filename*[.partition]
NET_NODE_TABLE	[net_directory]*filename*
NET_LINK_TABLE	[net_directory]*filename*
NET_PARKING_TABLE	[net_directory]*filename*
NET_ACTIVITY_LOCATION_TABLE	[net_directory]*filename*

Optional Keys

TITLE	Text
REPORT_FILE	*Filename*
REPORT_FLAG	FALSE {true/false/yes/no/1/0}
MAX_WARNING_MESSAGES	100,000
MAX_WARNING_EXIT_FLAG	TRUE {true/false/yes/no/1/0}
PROJECT_DIRECTORY	*Pathname*
DEFAULT_FILE_FORMAT	VERSION3 {(4)}
TRAVELER_SCALING_FACTOR	100 {2..100}
NET_DIRECTORY	*Pathname*

NET_SHAPE_TABLE	[net_directory]*filename*
NET_TRANSIT_STOP_TABLE	[net_directory]*filename*
NET_TRANSIT_ROUTE_TABLE	[net_directory]*filename*
NET_TRANSIT_DRIVER_TABLE	[net_directory]*filename*
LINK_DELAY_FILE	[project_directory]*filename*
HOUSEHOLD_LIST	[project_directory]*filename*[.partition] (12)
PLAN_FORMAT	VERSION3 {VERSION3/BINARY}
NODE_LIST_PATHS	TRUE {true/false/yes/no/1/0}
PROBLEM_FILE	[project_directory]*filename*
ARCVIEW_PLAN_FILE	[project_directory]*filename.shp* (1)
ARCVIEW_PROBLEM_FILE	[project_directory]*filename.shp* (1)
ARCVIEW_BANDWIDTH_FILE	[project_directory]*filename.shp* (1)
ARCVIEW_TIME_CONTOUR	[project_directory]*filename.shp* (1)
ARCVIEW_DISTANCE_CONTOUR	[project_directory]*filename.shp* (1)
ARCVIEW_ACCESSIBILITY_FILE	[project_directory]*filename.shp* (1)
ARCVIEW_RIDERSHIP_FILE	[project_directory]*filename.shp* (1)
ARCVIEW_STOP_DEMAND_FILE	[project_directory]*filename.shp* (1)
ARCVIEW_STOP_GROUP_FILE	[project_directory]*filename.shp* (1)
ARCVIEW_PARKING_DEMAND_FILE	[project_directory]*filename.shp* (1)
TIME_OF_DAY_FORMAT	24_HOUR_CLOCK {(5)}
SELECT_TRAVELERS	All (2)
SELECT_NODES_#	All (2)
SELECT_LINKS_#	All (2)
SELECT_TIME_PERIODS	All (3)
SELECT_LOCATIONS	All (2)
SELECT_PARKING_LOTS	All (2)
SELECT_TRANSIT_STOPS	All (2)
SELECT_TRANSIT_ROUTES	All (2)
SELECT_TRANSIT_MODES	All (10)
SELECT_PROBLEM_TYPES	All {(6)}
SELECT_RANDOM_PERCENTAGE	100 percent {0.01..100.0}
RANDOM_NUMBER_SEED	0 {>= 0}
LINK_DIRECTION_OFFSET (2)	0.0 meters {0.0..15.0}
PARKING_SIDE_OFFSET	5.0 meters {0.0..50.0}
ACTIVITY_LOCATION_SIDE_OFFSET	15.0 meters {0.0..100.0}
TRANSIT_STOP_SIDE_OFFSET	5.0 meters {0.0..50.0}
TRANSIT_DIRECTION_OFFSET	0.0 meters {0.0..15.0}
BANDWIDTH_SCALING_FACTOR	1.0 trips / meter {0.01..100,000}
MINIMUM_BANDWIDTH_VALUE	0 trips {0..100,000}
MINIMUM_BANDWIDTH_SIZE	0.1 meters {0.001..10}

MAXIMUM_BANDWIDTH_SIZE	1000 meters {1..10,000}
MAXIMUM_SHAPE_ANGLE	45 degrees {5..120}
MINIMUM_SHAPE_LENGTH	5 meters {1..50}
CONTOUR_TIME_INCREMENTS	0 seconds (0..86400) (9)
CONTOUR_DISTANCE_INCREMENTS	0 meters (10..1,000,000) (9)
RIDERSHIP_SCALING_FACTOR	1.0 rider / meter {0.01..100,000}
MINIMUM_BANDWIDTH_VALUE	0 riders {0..100,000}
MINIMUM_BANDWIDTH_SIZE	0.1 meters {0.001..10}
MAXIMUM_BANDWIDTH_SIZE	1000 meters {1..10,000}
STOP_EQUIVALENCE_FILE	[project_directory]*filename* (11)
INPUT_COORDINATE_SYSTEM	System, Code, Units (7)
INPUT_ADJUSTMENT_FACTORS	X offset, Y offset, X factor, Y factor (8)
OUTPUT_COORDINATE_SYSTEM	System, Code, Units (7)
OUTPUT_ADJUSTMENT_FACTORS	X offset, Y offset, X factor, Y factor (8)
OUTPUT_XYZ_SHAPES	FALSE {true/false/yes/no/1/0}
OUTPUT_XYM_SHAPES	FALSE {true/false/yes/no/1/0}
NET_DEFAULT_FORMAT	[default_file_format] {(4)}
NET_NODE_FORMAT	[net_default_format] {(4)}
NET_LINK_FORMAT	[net_default_format] {(4)}
NET_SHAPE_FORMAT	[net_default_format] {(4)}
NET_LANE_CONNECTIVITY_FORMAT	[net_default_format] {(4)}
NET_PARKING_FORMAT	[net_default_format] {(4)}
NET_ACTIVITY_LOCATION_FORMAT	[net_default_format] {(4)}
NET_TRANSIT_STOP_FORMAT	[net_default_format] {(4)}
NET_TRANSIT_ROUTE_FORMAT	[net_default_format] {(4)}
NET_TRANSIT_DRIVER_FORMAT	[net_default_format] {(4)}
PROBLEM_FORMAT	[default_file_format] {(4)}

Notes

1	*.shp, *.shx, *.dbf, and *.dbf.def files are created based on the filename
2	ID Range (e.g., 1000, 2000, 3000..3100)
3	Time Range (e.g., 0:00..6:00, 18:00..23:00)
4	{VERSION3, BINARY, FIXED_COLUMN, COMMA_DELIMITED, SPACE_DELIMITED, TAB_DELIMITED, CSV_DELIMITED, DBASE, LANL, SQLITE3}
5	{HOURS, SECONDS, 24_HOUR_CLOCK, 12_HOUR_CLOCK}
6	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, ACCESS_RESTRICTION

7	System options include: UTM, STATEPLAN, and LATLONG Code is the FIPS code number for the system (e.g., Oregon North = 3601) Unit options include: FEET, METERS, MILES, KILOMETERS, DEGREES, and MILLION_DEGREES.
8	X and Y offsets are added to the coordinate values X and Y factors are multiply the coordinate values
9	One or more values can be specified. For example, 100, 300, 500. The last value is interpreted as additional increments if proceed by a "*" (e.g., 100, 300, 500, *1000).
10	{BUS, LOCAL_BUS, EXPRESS, EXPRESS_BUS, TROLLEY, STREETCAR, LIGHTRAIL, RAPIDRAIL, REGIONRAIL}
11	Required for Stop Group processing
12	Non-partitioned household list can be used with partitioned plan files.