ArcDelay Quick Reference

Version 4.0.17

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

Syntax:

ArcDelay [-flag] [control_file]

Purpose:

1. Create ArcView shapefiles from selected records in a TRANSIMS link delay file.
2. Create ArcView shapefiles from selected records in a TRANSIMS link direction file.
3. Create ArcView shapefiles from selected records in a TRANSIMS link data file.
4. Create ArcView shapefiles for intersection totals and turning movements.
5. Create ArcView shapefiles for various performance measures using traffic images and/or bandwidths plots.
6. Vehicle types and type distributions to draw vehicles as polygons or points layers.
7. Create ArcView shapefiles for selected records in the TRANSIMS system event file.
8. Create ArcView shapefiles for user-defined link-based data files.
9. Create ArcView shapefiles for congestion-duration measures.
10. Create ArcView shapefiles with values weighted by vehicle occupancy (i.e., persons).

Required Keys

LINK_DELAY_FILE (1)	[project_directory]*filename*
NET_NODE_TABLE	[net_directory]*filename*
NET_LINK_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)}
LINK_DIRECTION_FILE (1)	[project_directory]*filename*
LINK_DATA_FILE (1)	[project_directory]*filename*
NET_DIRECTORY	*Pathname*
NET_SHAPE_TABLE	[net_directory]*filename*
NET_LANE_CONNECTIVITY_TABLE	[net_directory]*filename*

NET_LANE_USE_TABLE	[net_directory]*filename*
NET_POCKET_LANE_TABLE	[net_directory]*filename*
VEHICLE_TYPE_FILE	[project_directory]*filename*
SYSTEM_EVENT_FILE	[project_directory]*filename*
ARCVIEW_LINK_DIR_FILE	[project_directory]*filename.shp* (2)
ARCVIEW_LINK_DATA_FILE	[project_directory]*filename.shp* (2)
ARCVIEW_DELAY_FILE (3)	[project_directory]*filename.shp* (2)
ARCVIEW_INTERSECTION_FILE (5)	[project_directory]*filename.shp* (2)
ARCVIEW_TURN_FILE (6)	[project_directory]*filename.shp* (2)
ARCVIEW_TRAFFIC_IMAGE (7)	[project_directory]*filename.shp* (2)
ARCVIEW_TRAFFIC_IMAGE_# (7)	[project_directory]*filename.shp* (2)
TRAFFIC_IMAGE_ATTRIBUTE	(7)
TRAFFIC_IMAGE_ATTRIBUTE_#	(7)
VEHICLE_TYPE_DISTRIBUTION	100 (8)
RANDOM_NUMBER_SEED	0 {>= 0}
DRAW_VEHICLE_SHAPES (8)	FALSE {true/false/yes/no/1/0}
DRAW_NETWORK_LANES	FALSE {true/false/yes/no/1/0}
LANE_WIDTH	1.0 meters {0.0..25.0}
CENTER_ONEWAY_LINKS	FALSE {true/false/yes/no/1/0}
LINK_DIRECTION_OFFSET	0.0 meters {0.0..15.0}
BANDWIDTH_FIELD (3)	*field_name*
BANDWIDTH_SCALING_FACTOR	1.0 units / meter {0.01..100000.0}
MINIMUM_BANDWIDTH_VALUE	0 {0..100000}
MINIMUM_BANDWIDTH_SIZE	0.01 meters {0.001..10.0}
MAXIMUM_BANDWIDTH_SIZE	1000 meters {1..10000}
MAXIMUM_SHAPE_ANGLE	45 degrees {0, 5..120}
MINIMUM_SHAPE_LENGTH	5 meters (0..50}
TIME_OF_DAY_FORMAT	24_HOUR_CLOCK {(9)}
SELECT_TIME_PERIODS	All (10)
SELECT_TIME_INCREMENT	15 minutes {0, 5..7200}
SELECT_SUBAREA_POLYGON	[project_directory]*filename.shp*
ADD_LINK_DIRECTION_INDEX	FALSE {true/false/yes/no/1/0}
IGNORE_TIME_RANGE_FIELDS	FALSE {true/false/yes/no/1/0}
INPUT_COORDINATE_SYSTEM	System, Code, Units (11)
INPUT_ADJUSTMENT_FACTORS	X offset, Y offset, X factor, Y factor (12)
OUTPUT_COORDINATE_SYSTEM	System, Code, Units (11)
OUTPUT_ADJUSTMENT_FACTORS	X offset, Y offset, X factor, Y factor (12)
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_LANE_USE_FORMAT	[net_default_format] {(4)}
NET_POCKET_LANE_FORMAT	[net_default_format] {(4)}
VEHICLE_TYPE_FORMAT	[default_format] {(4)}

Notes

1	The primary input file is a link delay file, but alternate input can be from a link direction file or link data file generated by LinkSum. The link direction file draws link data in each direction while the link data file draw a link in the A-B direction with data in both the A-B and B-A directions.
2	*.shp, *.shx, *.dbf, and *.dbf.def files are created based on the filename. A separate file is created for each time increment. The corresponding time value is automatically added to the filename (i.e., *filename*.HHMM_HHMM.*shp*).
3	The delay file is by default a polyline file with data fields from the link delay file summarized for the selected time increment. If the bandwidth field key is specified, the link delay data will be drawn as a bandwidth polygon based on the value of the selected attribute.
4	{VERSION3, BINARY, FIXED_COLUMN, COMMA_DELIMITED, SPACE_DELIMITED, TAB_DELIMITED, CSV_DELIMITED, DBASE, LANL, SQLITE3}
5	The intersection file aggregates link delay data from all of the approach links to a node
6	The turning movement file draws the aggregate turn volume and delay from a Version 4 link delay file as individual movement polylines at the intersection. If the System Event file is included, the green, yellow and red split times are output as well.
7	If a traffic image is request, the image attribute must be one of the following values: VOLUME, DENSITY, MAX_DENSITY, QUEUE, MAX_QUEUE, or CYCLE_FAILURE. Traffic images also require vehicle type and pocket lane files. The lane-use file is also recommended. This data may be based on vehicles or weighted by vehicle occupancy (i.e., persons). LinkSum may add three additional field options: CONGESTED_VMT, CONGESTED_VHT, and CONGESTED_TIME.
8	If draw vehicle shapes is true, the traffic images will draw vehicles as a polygon pointing in the direction of travel. If false, a point is entered 1.5 meters back from the front of the vehicle. If the vehicle type distribution is provided, a vehicle size will be randomly selected based on the percentages in the distribution.
9	{HOURS, SECONDS, 24_HOUR_CLOCK, 12_HOUR_CLOCK}
10	Time Range (e.g., 0:00..6:00, 18:00..23:00)
11	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.
12	X and Y offsets are added to the coordinate values X and Y factors are multiply the coordinate values