NGSIM Traffic Data

Peachtree St Trajectory and Signal Timing Data

NGSIM Dataset

- Signal timings for 10th, 11th, 12th, and 14th

  - signalTiming.xls containing the signal times in seconds

- Ultra High resolution trajectory data for vehicles traversing 10th to 14th at 4:00 - 4:15pm

  - .csv containing time-stepped trajectory data, see next slides for structure

Name	col #	type
Vehicle ID	0	int
Frame ID	1	int
Total Frames	2	int
Epoch	3	int
Local x	4	float
Local y	5	float
Global x	6	float
Global y	7	float
Vehicle Length	8	int
Vehicle Width	9	int
Vehicle Class	10	int
Vehicle Velocity	11	float
Vehicle Acceleration	12	float
Lane Id	13	int
Originating Zone	14	int
Destination Zone	15	int
Intersection	16	int
Section	17	int
Direction	18	int
Movement	19	int
Preceding Vehicle	20	int
Following Vehicle	21	int
Spacing	22	float
Headway	23	float

Name	Description	Unit
Vehicle ID	Vehicle identification number (ascending by time of entry into section)	#
Frame ID	Frame identification number (ascending by start time)	0.1 s
Total Frames	Total number of frames in which the vehicle appears in this dataset.	0.1 s
Epoch	Epoch time, elapsed time since Jan. 1, 1970.	ms
Local x	Lateral (X) coordinate of the front center of the vehicle-perpendicular to the median of the Peachtree Street. Vehicles traveling on the east side of the median have positive local X values, while those traveling on the west side of the median have negative local X values.	feet
Local y	Longitudinal (Y) coordinate of the front center of the vehicle along the median of the Peachtree Street. The start point is at the southern boundary of the study area.	feet
Global x	X coordinate of the front center of the vehicle based on NAD83.	feet
Global y	Y coordinate of the front center of the vehicle based on NAD83.	feet
Vehicle Length	Length of the vehicle.	feet
Vehicle Width	Width of the vehicle.	feet
Vehicle Class	Vehicle type: 1 - motorcycle, 2 - auto, 3 – truck.	number
Vehicle Velocity	Instantaneous speed of vehicle.	ft/s
Vehicle Acceleration	Instantaneous acceleration of vehicle.	ft/s^2

Name	Description	Unit
Lane Id	Current lane position of vehicle. Lane numbering is incremented from the left-most lane, except for locations where left-turn or right-turn bays exist. Left-turn bays are numbered starting from 11 and are incremented from the leftmost left-turn bay.	#
Originating Zone	Origin zones of the vehicles, i.e., the place where the vehicles enter the tracking system. There are 21 origins in the study area, numbered from 101 through 123. Destination 204 and 209 are a one-way off-ramp; hence, there are no associated origin number 104 and 109.	#
Destination Zone	Destination zones of the vehicles, i.e. the place where the vehicles exit the tracking system. There are 22 destinations in the study area, numbered from 201 through 223. Origin 119 is a one-way off-ramp; hence there is no associated destination	#
Intersection	Intersection in which the vehicle is traveling. Intersections are numbered from 1 to 5, with intersection 1 at the southernmost, and intersection 5 at the northernmost section of the study area.	#
Section	Section in which the vehicle is traveling. Peachtree Street is divided into six sections (south of intersection 1; between intersections 1 and 2, 2 and 3, 3 and 4, 4 and 5, 5 and 6; and north of intersection 6).	#
Direction	Moving direction of the vehicle. 1 - east-bound (EB), 2 -north-bound (NB), 3 - west-bound (WB), 4 - south-bound (SB).	#
Movement	Movement of the vehicle. 1 - through (TH), 2 - left-turn (LT), 3 - right-turn (RT).	#
Preceding Vehicle	Vehicle ID of the lead vehicle in the same lane. A value of '0' represents no preceding vehicle	#
Following Vehicle	Vehicle ID of the vehicle following the subject vehicle in the same lane. A value of '0' represents no following vehicle.	#
Spacing	Space headway; spacing provides the distance between the front-center of a vehicle to the front-center of the preceding vehicle.	ft
Headway	Time headway; headway provides the time to travel from the front-center of a vehicle (at the speed of the vehicle) to the front-center of the preceding vehicle. A headway value of 9999.99 means that the vehicle is traveling at zero speed (congested conditions).	s

Supplemental Information

- A detailed overview here denotes:

    - intersections

    - lanes

    - driveways

- The original report yields the highest detail info and full descriptions

http://www.webs1.uidaho.edu/ngsim//ATL/A2.htm