GAMA Model Documentations

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This chapter will list all the functions used in this .

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Functions

5.1 update_mode_specific_memory()

Agent memory on travel time is updated every day based on its experience today. The agent uses last five days of memory to estimate the next days travel time. This memory is mode specific. In this model, agent has 4 memories [walk, bike, pt, car].

```
action update_mode_specific_memory (float tt, int mode)
  {
        //tt is morning_travel_time
        add tt to:self.mode_specific_memory[mode];
        remove index:0 from:self.mode_specific_memory[mode];

    }
```

arguments

- travel time (`float`) : the travel time experienced in the recent trip
- mode (`int`) : the mode used by the agent in recent trip

returns

- nothing : the function returns nothing, it just updates an existing variable.

usage

- the following example updates memory of mode 1 = walk.

```
do update_mode_specific_memory(travel_time, 1)
```

Chapter 6

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Species

The model has 4 species [inhabitants, buildings, roads, public transport system]

8.1 road

This species is imported from a shapefile. The attributes of this shapefile are imported and mapped into various model variables - as attributes of the road species.

8.2 buildings

This species is imported froma shapefile. The attributes of this shapefile are imported and mapped into various model variables - as attributes of the building species. The main classification of buildings is based on its usage. Curerntly the model only distinguishes between [office, home].

Figure 8.1: “Road Network”

Figure 8.2: “Buildings”

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