```
streets vehicle scheduler
      ::vehicle scheduler
  #intersection info
  + vehicle scheduler()
  + ~vehicle_scheduler()
  + schedule vehicles()
  + get_intersection_info()
  + set intersection info()
  #estimate vehicles at
  common time()
  # get_entry_lanelet info()
  # get_link_lanelet info()
streets vehicle scheduler
::signalized vehicle scheduler
spat_ptr
- initial green buffer
-final green buffer
+ signalized vehicle
scheduler()
+ ~signalized vehicle
scheduler()
+ schedule_vehicles()
+ set initial green buffer()
+ get_initial_green_buffer()
+ set_final_green_buffer()
+ get final green buffer()
+ get_spat()
+ set_spat()
schedule dvs()
- schedule evs()
estimate et()

    calculate earliest

 entering_time()

    calculate distance

accel and decel()

    calculate_distance

accel or decel()
calculate v hat()
- calculate acceleration
 time()

    calculate deceleration

time()
- calculate cruising
time()
- calculate min headway()

    estimate clearance

time()
```

find movement state

for lane()