



Passenger Management is incorporated into the move\_next\_bus event in the diagram above. When a bus arrives at a stop, updateEventExecutionTimes() is called. After any bus changes have been evaluated, the passenger exchanges occur as indicated above. newPassengersArrive() handles new arrivals to the system at this stop. unloadPassengersfromBus() unloads numRidersOff passengers + any excess passengers over capacity in the effect of a bus capacity change and adds these to numPassengersTransfers. loadPassengersfromStop() takes numPassengersOn from numPassengersWaiting and adds this to numPassengersRiding, while not exceeding maxCapacity of bus. passengersDepartStop() removes numPassengerDepart first from numPassengersTransfers, and if needed upon depleting numPassengersTransfers, from numPassengersWaiting. Remaining numPassengersTransfers are added to numPassengersWaiting. Then updateEventExecutionTimes() calculates system efficiency and proceeds to update event information for next event.