What is claimed is:

1. A method of managing transit signal priority (TSP) requests, comprising:

detecting arrival of a first transit vehicle at a transit stop;

storing a first value indicative of an actual arrival time in a memory in response to the arrival of the first transit vehicle at the transit stop;

determining by a processor from the first value whether or not the actual arrival time of the first transit vehicle satisfies a scheduling parameter;

enabling a priority request device to make TSP requests in response to the actual arrival time of the first transit vehicle not satisfying the scheduling parameter; and

disabling the priority request device from making TSP requests in response to the actual arrival time of the first transit vehicle satisfying the scheduling parameter.

2. The method of claim 1, wherein the scheduling parameter indicates a scheduled arrival time of the first transit vehicle at the transit stop and the determining includes:

determining that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first value indicating that the actual arrival time precedes the scheduled arrival time; and

determining that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first value indicating that the actual arrival time is after the scheduled arrival time by a threshold quantity of time.

3. The method of claim 1, further comprising:

in response to a second transit vehicle arriving at the transit stop before the first transit vehicle, storing a second value indicative of an actual arrival time in association with an identifier of the second transit vehicle;

wherein the scheduling parameter indicates a scheduled headway separating the first transit vehicle from the second transit vehicle, and the determining includes:

determining that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by more than the scheduled headway plus a threshold quantity of time, or indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by less than the scheduled headway minus the threshold quantity of time; and

determining that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by less than the scheduled headway plus the threshold quantity of time and indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by more than the scheduled headway minus the threshold quantity of time.

4. The method of claim 3, wherein the scheduling parameter includes a plurality of headway values and associated times-of-day, and the method further comprising selecting one of the headway values as the scheduled headway based on current time-of-day and the times-of-day associated with the headway values.

5. The method of claim 4, wherein the plurality of headway values have associated days, and the method further comprising selecting one of the headway values as the scheduled headway based on a current day and the days associated with the headway values.

6. The method of claim 1, wherein the scheduling parameter is selectable between a stop-time parameter and a headway parameter, the stop-time parameter indicates a scheduled arrival time of the first transit vehicle at the transit stop, and the headway parameter indicates a scheduled headway separating two transit vehicles, the method further comprising:

in response to selection of the stop-time parameter, the determining includes:

determining that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first value indicating that the actual arrival time precedes the scheduled arrival time; and

determining that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first value indicating that the actual arrival time is after the scheduled arrival time by a threshold quantity of time;

in response to selection of the headway parameter:

in response to a second transit vehicle arriving at the transit stop before the first transit vehicle, storing a second value indicative of an actual arrival time in association with an identifier of the second transit vehicle; and

the determining includes:

determining that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by more than the scheduled headway plus the threshold quantity of time, or indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by less than the scheduled headway minus the threshold quantity of time; and

determining that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by less than the scheduled headway plus the threshold quantity of time and indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by more than the scheduled headway minus the threshold quantity of time.

7. The method of claim 1, further comprising:

storing the scheduling parameter on a transit-stop module;

wherein the determining includes the transit-stop module using the scheduling parameter and the first value to determine whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter; and

transmitting a signal indicative of an adherence status from the transit-stop module to the priority request device, the adherence status indicating whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter.

8. The method of claim 1, further comprising:

storing the scheduling parameter on a server that is coupled to a plurality of transit-stop modules at a plurality of transit stops;

transmitting the first value from one transit-stop module of the plurality of transit-stop modules to the server;

wherein the determining whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter is performed by the server;

transmitting from the server to the one transit-stop module, data that indicate whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter; and

transmitting a signal indicative of an adherence status from the one transit-stop module to the priority request device, the adherence status indicating whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter.

9. The method of claim 1, further comprising:

determining a current geographical location of the first transit vehicle by the priority request device; and

in response to the current geographical location matching a geographical location of the transit stop, determining a current time, and setting the first value to a value indicative of the current time.

10. The method of claim 1, wherein the detecting arrival includes:

determining a current speed of the first transit vehicle; and

in response to the current speed being 0 and a door of the first transit vehicle being open, determining a current time, and setting the first value to a value indicative of the current time.

11. The method of claim 1, further comprising:

wherein the detecting arrival includes:

determining a current geographical location of the first transit vehicle by the priority request device;

transmitting information indicative of the current geographical location and identity of the first transit vehicle from the priority request device to a server that is coupled to a plurality of transit-stop modules at a plurality of transit stops; and

determining by the server whether or not the current geographical location matches a geographical location of the transit stop, wherein one transit-stop module of the plurality of transit-stop modules is located at the transit stop;

in response to the current geographical location matching the geographical location of the transit stop, determining a current time by the server, and setting the first value to a value indicative of the current time;

wherein the determining whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter is performed by the server;

transmitting from the server to the one transit-stop module, data that indicate whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter; and

transmitting a signal indicative of an adherence status from the one transit-stop module to the priority request device, the adherence status indicating whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter.

12. The method of claim 1, further comprising:

detecting departure of the first transit vehicle from the transit stop;

storing a second value indicative of an actual departure time in association with an identifier of the first transit vehicle on a transit-stop module at the transit stop in response to the first transit vehicle departing from the transit stop;

determining from the second value whether or not the actual departure time of the first transit vehicle satisfies a departure parameter; and

transmitting a signal indicative of an adherence status from the transit-stop module to the priority request device, the adherence status indicating whether or not the actual departure time of the first transit vehicle satisfies the scheduling parameter;

wherein the enabling includes enabling the priority request device to make TSP requests in response to the adherence status indicating the actual departure time of the first transit vehicle does not satisfy the scheduling parameter;

wherein the disabling includes disabling the priority request device from making TSP requests in response to the adherence status indicating the actual departure time of the first transit vehicle satisfies the scheduling parameter.

13. A system for managing transit signal priority (TSP) requests, comprising:

a priority request device configured to be mounted to a first transit vehicle and configured to:

determine a current location of the first transit vehicle; and

transmit vehicle location information indicative of the current location;

a transit-stop module configured for placement at a transit stop and configured to:

store a scheduling parameter and transit-stop location information indicative of a geographical location of the transit stop;

receive the vehicle location information transmitted by the priority request device;

determine whether or not the vehicle location information matches the transit-stop location information;

determine an actual arrival time in response to the vehicle location information matching the transit-stop location information;

store a first value indicative of the actual arrival time in a memory;

determine whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter; and

transmit a signal indicative of an adherence status to the priority request device, the adherence status indicating whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter;

wherein the priority request device is further configured to:

enable making TSP requests in response to the adherence status indicating the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter; and

disable making TSP requests in response to the adherence status indicating the actual arrival time of the first transit vehicle satisfies the scheduling parameter.

14. The system of claim 13, wherein the scheduling parameter indicates a scheduled arrival time of the first transit vehicle at the transit stop and the transit-stop module is further configured to:

determine that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first value indicating that the actual arrival time precedes the scheduled arrival time; and

determine that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first value indicating that the actual arrival time is after the scheduled arrival time by a threshold quantity of time.

15. The system of claim 13, wherein the transit-stop module is further configured to:

store, in response to a second transit vehicle arriving at the transit stop before the first transit vehicle, a second value indicative of an actual arrival time in association with an identifier of the second transit vehicle;

wherein the scheduling parameter indicates a scheduled headway separating the first transit vehicle from the second transit vehicle;

determine that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by more than the scheduled headway plus a threshold quantity of time, or indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by less than the scheduled headway minus the threshold quantity of time; and

determine that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the

second transit vehicle by less than the scheduled headway plus the threshold quantity of time and indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by more than the scheduled headway minus the threshold quantity of time.

16. A system for managing transit signal priority (TSP) requests of, comprising:

a priority request device configured to be mounted to a first transit vehicle and configured to:

determine a current location of the first transit vehicle; and

transmit vehicle location information indicative of the current location;

a transit-stop module configured to be placed at a transit stop and configured to:

store stop location information indicative of a geographical location of the transit stop;

receive the vehicle location information transmitted by the priority request device;

determine whether or not the vehicle location information matches the stop location information;

determine an actual arrival time in response to the vehicle location information matching the stop location information; and

transmit a first value indicative of the actual arrival time; and

a server coupled to the transit-stop module and configured to:

store a scheduling parameter;

receive the first value from the transit-stop module;

determine whether or not the first value satisfies the scheduling parameter; and

transmit to the transit-stop module data that indicate whether or not the first value satisfies the scheduling parameter;

wherein the transit-stop module is further configured to:

transmit a signal indicative of an adherence status to the priority request device, the adherence status indicating whether or not the first value satisfies the scheduling parameter;

wherein the priority request device is further configured to:

enable making TSP requests in response to the adherence status indicating the first value does not satisfy the scheduling parameter; and

disable making TSP requests in response to the adherence status indicating the first value satisfies the scheduling parameter.

17. The system of claim 16, wherein the scheduling parameter indicates a scheduled arrival time of the first transit vehicle at the transit stop and the server is further configured to:

determine that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first value indicating that the actual arrival time precedes the scheduled arrival time; and

determine that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first value indicating that the actual arrival time is after the scheduled arrival time by a threshold quantity of time.

18. The system of claim 16, wherein the server is further configured to:

store, in response to a second transit vehicle arriving at the transit stop before the first transit vehicle, a second value indicative of an actual arrival time in association with an identifier of the second transit vehicle;

wherein the scheduling parameter indicates a scheduled headway separating the first transit vehicle from the second transit vehicle;

determine that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by more than the scheduled headway plus a threshold quantity of time, or indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by less than the scheduled headway minus the threshold quantity of time; and

determine that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by less than the scheduled headway plus the threshold quantity of time and indicating that the actual arrival time of the second transit

vehicle precedes the actual arrival time of the first transit vehicle by more than the scheduled headway minus the threshold quantity of time.

19. A system for managing transit signal priority (TSP) requests, comprising:

a priority request device configured to be mounted to a first transit vehicle and configured to:

determine a current location of the first transit vehicle; and

transmit vehicle location information indicative of the current location; and

a server coupled to the priority request device and configured to:

store stop location information indicative of a geographical location of a transit stop;

receive the vehicle location information transmitted by the priority request device;

determine whether or not the vehicle location information matches the stop location information;

determine an actual arrival time in response to the vehicle location information matching the stop location information;

store a first value indicative of the actual arrival time in a memory;

store a scheduling parameter;

determine whether or not the actual arrival time satisfies the scheduling parameter; and

transmit a signal indicative of an adherence status to the priority request device, the adherence status indicating whether or not the first value satisfies the scheduling parameter;

wherein the priority request device is further configured to:

enable making TSP requests in response to the adherence status indicating the first value does not satisfy the scheduling parameter; and

disable making TSP requests in response to the adherence status indicating the first value satisfies the scheduling parameter.

20. The system of claim 19, wherein the scheduling parameter indicates a scheduled arrival time of the first transit vehicle at the transit stop and the server is further configured to:

determine that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first value indicating that the actual arrival time precedes the scheduled arrival time; and

determine that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first value indicating that the actual arrival time is after the scheduled arrival time by a threshold quantity of time.

21. The system of claim 19, wherein the server is further configured to:

store, in response to a second transit vehicle arriving at the transit stop before the first transit vehicle, a second value indicative of an actual arrival time in association with an identifier of the second transit vehicle;

wherein the scheduling parameter indicates a scheduled headway separating the first transit vehicle from the second transit vehicle;

determine that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by more than the scheduled headway plus a threshold quantity of time, or indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by less than the scheduled headway minus the threshold quantity of time; and

determine that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by less than the scheduled headway plus the threshold quantity of time and indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by more than the scheduled headway minus the threshold quantity of time.

22. A method of managing transit signal priority (TSP) requests, comprising:

detecting departure of a first transit vehicle from a transit stop;

storing a first value indicative of an actual departure time in a memory in response to the departure of the first transit vehicle at the transit stop;

determining by a processor from the first value whether or not the actual departure time of the first transit vehicle satisfies a scheduling parameter;

enabling a priority request device to make TSP requests in response to the actual departure time of the first transit vehicle not satisfying the scheduling parameter; and

disabling the priority request device from making TSP requests in response to the actual departure time of the first transit vehicle satisfying the scheduling parameter.

What is claimed is:

1. A method of managing transit signal priority (TSP) requests, comprising:

detecting arrival of a first transit vehicle at a transit stop;

storing a first value indicative of an actual arrival time in a memory in response to the arrival of the first transit vehicle at the transit stop;

determining by a processor from the first value whether or not the actual arrival time of the first transit vehicle satisfies a scheduling parameter;

enabling a priority request device to make TSP requests in response to the actual arrival time of the first transit vehicle not satisfying the scheduling parameter;

disabling the priority request device from making TSP requests in response to the actual arrival time of the first transit vehicle satisfying the scheduling parameter; and

in response to a second transit vehicle arriving at the transit stop before the first transit vehicle, storing a second value indicative of an actual arrival time in association with an identifier of the second transit vehicle;

wherein the scheduling parameter indicates a scheduled headway separating the first transit vehicle from the second transit vehicle, and the determining includes:

determining that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by more than the scheduled headway plus a threshold quantity of time, or indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by less than the scheduled headway minus the threshold quantity of time; and

determining that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by less than the scheduled headway plus the threshold quantity of time and indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by more than the scheduled headway minus the threshold quantity of time.

2. The method of claim 1, wherein the scheduling parameter indicates a scheduled arrival time of the first transit vehicle at the transit stop and the determining whether or not the actual arrival time of the first transit vehicle satisfies a scheduling parameter includes:

determining that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first value indicating that the actual arrival time precedes the scheduled arrival time; and

determining that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first value indicating that the actual arrival time is after the scheduled arrival time by a threshold quantity of time.

3. The method of claim 1, wherein the scheduling parameter includes a plurality of headway values and associated times-of-day, and the method further comprising selecting one of the headway values as the scheduled headway based on current time-of-day and the times-of-day associated with the headway values.

4. The method of claim 3, wherein the plurality of headway values have associated days, and the method further comprising selecting one of the headway values as the scheduled headway based on a current day and the days associated with the headway values.

5. The method of claim 1, wherein the scheduling parameter is selectable between a stop-time parameter and a headway parameter, the stop-time parameter indicates a scheduled arrival time of the first transit vehicle at the transit stop, and the headway parameter indicates a scheduled headway separating two transit vehicles, the method further comprising:

in response to selection of the stop-time parameter, the determining whether or not the actual arrival time of the first transit vehicle satisfies a scheduling parameter includes:

the determining that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first value indicating that the actual arrival time precedes the scheduled arrival time; and

the determining that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first value indicating that the actual arrival time is after the scheduled arrival time by a threshold quantity of time;

in response to selection of the headway parameter, the determining whether or not the actual arrival time of the first transit vehicle satisfies a scheduling parameter includes:

the determining that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by more than the scheduled headway plus the threshold quantity of time, or indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by less than the scheduled headway minus the threshold quantity of time; and

the determining that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by less than the scheduled headway plus the threshold quantity of time and indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by more than the scheduled headway minus the threshold quantity of time.

6. The method of claim 1, further comprising:

storing the scheduling parameter on a transit-stop module;

wherein the determining whether or not the actual arrival time of the first transit vehicle satisfies a scheduling parameter includes the transit-stop module using the scheduling parameter and the first value to determine whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter; and

transmitting a signal indicative of an adherence status from the transit-stop module to the priority request device, the adherence status indicating whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter.

7. The method of claim 1, further comprising:

storing the scheduling parameter on a server that is coupled to a plurality of transit-stop modules at a plurality of transit stops;

transmitting the first value from one transit-stop module of the plurality of transit-stop modules to the server;

wherein the determining whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter is performed by the server;

transmitting from the server to the one transit-stop module, data that indicate whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter; and

transmitting a signal indicative of an adherence status from the one transit-stop module to the priority request device, the adherence status indicating whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter.

8. The method of claim 1, further comprising:

determining a current geographical location of the first transit vehicle by the priority request device; and

in response to the current geographical location matching a geographical location of the transit stop, determining a current time, and setting the first value to a value indicative of the current time.

9. The method of claim 1, wherein the detecting arrival includes:

determining a current speed of the first transit vehicle; and

in response to the current speed being 0 and a door of the first transit vehicle being open, determining a current time, and setting the first value to a value indicative of the current time.

10. The method of claim 1, further comprising:

wherein the detecting arrival includes:

determining a current geographical location of the first transit vehicle by the priority request device;

transmitting information indicative of the current geographical location and identity of the first transit vehicle from the priority request device to a

server that is coupled to a plurality of transit-stop modules at a plurality of transit stops; and

determining by the server whether or not the current geographical location matches a geographical location of the transit stop, wherein one transit-stop module of the plurality of transit-stop modules is located at the transit stop;

in response to the current geographical location matching the geographical location of the transit stop, determining a current time by the server, and setting the first value to a value indicative of the current time;

wherein the determining whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter is performed by the server;

transmitting from the server to the one transit-stop module, data that indicate whether or not the arrival time of the first transit vehicle satisfies the scheduling parameter; and

transmitting a signal indicative of an adherence status from the one transit-stop module to the priority request device, the adherence status indicating whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter.

11. The method of claim 1, further comprising:

detecting departure of the first transit vehicle from the transit stop;

storing a second value indicative of an actual departure time in association with an identifier of the first transit vehicle on a transit-stop module at the transit stop in response to the first transit vehicle departing from the transit stop;

determining from the second value whether or not the actual departure time of the first transit vehicle satisfies a departure parameter; and

transmitting a signal indicative of an adherence status from the transit-stop module to the priority request device, the adherence status indicating whether or not the actual departure time of the first transit vehicle satisfies the scheduling parameter;

wherein the enabling includes enabling the priority request device to make TSP requests in response to the adherence status indicating the actual departure time of the first transit vehicle does not satisfy the scheduling parameter;

wherein the disabling includes disabling the priority request device from making TSP requests in response to the adherence status indicating the actual departure time of the first transit vehicle satisfies the scheduling parameter.

12. A system for managing transit signal priority (TSP) requests, comprising:

a priority request device configured to be mounted to a first transit vehicle and configured to:

determine a current location of the first transit vehicle; and

transmit vehicle location information indicative of the current location;

a transit-stop module configured for placement at a transit stop and configured to:

store a scheduling parameter and transit-stop location information indicative of a geographical location of the transit stop;

receive the vehicle location information transmitted by the priority request device;

determine whether or not the vehicle location information matches the transit-stop location information;

determine an actual arrival time in response to the vehicle location information matching the transit-stop location information;

store a first value indicative of the actual arrival time in a memory;

determine whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter; and

transmit a signal indicative of an adherence status to the priority request device, the adherence status indicating whether or not the actual arrival time of the first transit vehicle satisfies the scheduling parameter;

wherein the priority request device is further configured to:

enable making TSP requests in response to the adherence status indicating the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter; and

disable making TSP requests in response to the adherence status indicating the actual arrival time of the first transit vehicle satisfies the scheduling parameter; and

wherein the transit-stop module is further configured to:

store, in response to a second transit vehicle arriving at the transit stop before the first transit vehicle, a second value indicative of an actual arrival time in association with an identifier of the second transit vehicle;

wherein the scheduling parameter indicates a scheduled headway separating the first transit vehicle from the second transit vehicle;

determine that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by more than the scheduled headway plus a threshold quantity of time, or indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by less than the scheduled headway minus the threshold quantity of time; and

determine that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first and second values indicating that the actual arrival time of the first transit vehicle follows the actual arrival time of the second transit vehicle by less than the scheduled headway plus the threshold quantity of time and indicating that the actual arrival time of the second transit vehicle precedes the actual arrival time of the first transit vehicle by more than the scheduled headway minus the threshold quantity of time.

13. The system of claim 12, wherein the scheduling parameter indicates a scheduled arrival time of the first transit vehicle at the transit stop and the transit-stop module is further configured to:

determine that the actual arrival time of the first transit vehicle satisfies the scheduling parameter in response to the first value indicating that the actual arrival time precedes the scheduled arrival time; and

determine that the actual arrival time of the first transit vehicle does not satisfy the scheduling parameter in response to the first value indicating that the actual arrival time is after the scheduled arrival time by a threshold quantity of time.