MBTA

MBTA-REALTIME API FOR PERFORMANCE DATA DOCUMENTATION (V 0.9.7)

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1. OVERVIEW

The current MBTA-realtime documentation available at https://www.mbta.com/developers provides information about how to access schedule, prediction, vehicle location, and alert information from the MBTA-realtime API. This document covers the API calls that provide performance information for **heavy rail and light rail modes only**. These calls are available in API v2.1 at this time. It is expected that the MBTA-performance API (v2.1) will remain separate from the MBTA-realtime API (v3).

2. QUERIES

The table below lists the performance queries available through the MBTA-performance API. The performance queries are documented in full over the following pages. Examples and terminology are in JSON; for XML assume "object" means "element" and "property" means "attribute" unless otherwise stated.

Query	Returns
traveltimes	travel times and benchmark travel times, between an origin destination pair
dwelltimes	dwell times, for a stop
headways	departure headways and benchmark headways, for a stop
dailymetrics	daily top line metrics, for a route
currentmetrics	current (last hour and current service date until current time) top line metrics, for a route
events	arrival and departure events, for a route, direction and/or stop
pastalerts	alerts in effect during a time period, for a route, stop and/or trip

2.1 Thresholds for Performance Measurement

threshold_id	threshold_type	threshold_name	Modes	Description
threshold_id_01	wait_time_headway_based	Headway	Heavy Rail, Light Rail	exceeds threshold if actual headway is greater than the scheduled headway
threshold_id_02	wait_time_headway_based	Big Gap	Heavy Rail, Light Rail	exceeds threshold if actual headway is greater than 1.5X the scheduled headway or the scheduled headway plus 3 minutes, whichever is smaller
threshold_id_03	wait_time_headway_based	2X Headway	Heavy Rail, Light Rail	exceeds threshold if actual headway is greater than 2X the scheduled headway
threshold_id_04	travel_time	delayed < 3 min.	Heavy Rail, Light Rail	exceeds threshold if actual travel time is delayed 3 minutes more than the scheduled travel time
threshold_id_05	travel_time	delayed < 6 min.	Heavy Rail, Light Rail	exceeds threshold if actual travel time is delayed 6 minutes more than the scheduled travel time
threshold_id_06	travel_time	delayed 10 min.	Heavy Rail, Light Rail	exceeds threshold if actual travel time is delayed 10 minutes more than the scheduled travel time

Note: this threshold is a placeholder that is currently set at 10 minutes, but may be changed in the future |

2.2   Performance Queries

2.2.1   TRAVELTIMES

This query will return a list of travel times as well as benchmark travel times between an origin-destination (O-D) pair during the time period defined in the call. Travel times are flagged if they are above certain thresholds compared to the benchmark travel times.

Special Parameters

Name	Description
from_stop	GTFS-compatible stop_id value for the origin stop for which travel times should be returned. Data type: String. Example: 70069
to_stop	GTFS-compatible stop_id value for the destination stop for which travel times should be returned. Data type: String. Example: 70075
route (optional)	GTFS-compatible route_id value for which travel times should be returned. If this is not included, travel times for all routes between the origin and destination stops will be returned. Data type: String. Example: Red
from_datetime	Start of the time period that the travel time (arrival time at the destination stop) should fall within; must be provided in epoch time. Data type: Integer, in epoch time. Example: 1429149600
to_datetime	End of the time period that the travel time (arrival time at the destination stop) should fall within; must be provided in epoch time. Data type: Integer, in epoch time. Example: 1429250399

Response Fields

Name	Description
travel_times	Root object of the feed
route_id	Property of "travel_times". String. The GTFS-compatible unique identifier for the route for which travel times are returned. Example: Red
direction	Property of "travel_times". String representation of a Bit (0 or 1). The GTFS-compatible direction value (1 or 0) for which travel times are returned. Example: 0
dep_dt	Property of "travel_times". String representation of an Integer. The actual departure time at the origin stop, in epoch time. Example: 1429177049

Name	Description
arr_dt	Property of "travel_times". String representation of an Integer. The actual arrival time at the destination stop, in epoch time. Example: 1429177403
travel_time_sec	Property of "travel_times". String representation of an Integer. The actual travel time between the origin stop and the destination stop, in seconds. Example: 354
benchmark_travel_time_sec	Property of "travel_times". String representation of an Integer The scheduled average travel time (during the 30-minute time slice in which this travel time occurs) between the origin stop and the destination stop, in seconds. Example: 360
threshold_flag_1 (optional)	Property of "travel_times". String. Heavy Rail and Light Rail: 'threshold_id_04' if the difference between the travel_time_sec and the benchmark_travel_time_sec is above the threshold_id_04 (delayed > 3 min.) otherwise not returned Example: threshold_id_04
threshold_flag_2 (optional)	Property of "travel_times". String. Heavy Rail and Light Rail: 'threshold_id_05' if the difference between the travel_time_sec and the benchmark_travel_time_sec is above the threshold_id_05 (delayed > 6 min.) otherwise not returned Example: threshold_id_05
threshold_flag_3 (optional)	Property of "travel_times". String. Heavy Rail and Light Rail: 'threshold_id_06' if the difference between the travel_time_sec and the benchmark_travel_time_sec is above the threshold_id_06 (delayed > 10 min.) otherwise not returned Example: threshold_id_06 Note: this threshold is a placeholder that is currently set at 10 minutes, but may be changed in the future

Notes

Data can be queried for current date and the prior 90 days. A maximum time span of 7 days is allowed between from_datetime and to_datetime.

Example

https://performanceapi.mbta.com/developer/api/v2.1/traveltimes?api_key=wX9NwuHnZU2ToO7GmGR9uw&format=json&from_stop=70172&to_stop=70182&from_datetime=1457454139&to_datetime=1457455262

```
{
   "travel_times":[
      {
         "route_id":"Green-D",
         "direction":"1",
         "dep_dt":"1457453760",
         "arr_dt":"1457454560",
         "travel_time_sec":"800",
         "benchmark_travel_time_sec":"480",
         "threshold_flag_1":"threshold_id_04"
      },
```

```
    {
        "route_id":"Green-D",
        "direction":"1",
        "dep_dt":"1457454105",
        "arr_dt":"1457454658",
        "travel_time_sec":"553",
        "benchmark_travel_time_sec":"480"
    }
  ]
}
```

2.2.2   DWELLS

This query will return a list of dwell times at a stop during the time period defined in the call.

Special Parameters

Name	Description
stop	GTFS-compatible stop_id value for the stop for which dwell times should be returned. Data type: String. Example: 70069
route (optional)	GTFS-compatible route_id value for which dwell times should be returned. If this is not included, dwell times for all routes serving the stop will be returned. Data type: String. Example: Red
direction (optional)	GTFS-compatible direction_id value for which dwell times should be returned. If this is not included, dwell times for all directions for the stop will be returned. Data type: Integer. Example: 0
from_datetime	Start of the time period that the dwell time (departure time from the stop) should fall within; must be provided in epoch time. Data type: Integer, in epoch time. Example: 1429149600
to_datetime	End of the time period that the dwell time (departure time from the stop) should fall within; must be provided in epoch time. Data type: Integer, in epoch time. Example: 1429250399

Response Fields

Name	Description
dwell_times	Root object of the feed
route_id	Property of "dwell_times". String. The GTFS-compatible unique identifier for the route for which dwell times are returned. Example: Red

Name	Description
direction	Property of "dwell_times". String representation of a Bit (0 or 1). The GTFS-compatible direction value (1 or 0) for for which dwell times are returned. Example: 0
arr_dt	Property of "dwell_times". String representation of an Integer. The actual arrival time at the stop, in epoch time. Example: 1429177343
dep_dt	Property of "dwell_times". String representation of an Integer. The actual departure time from the stop, in epoch time. Example: 1429177430
dwell_time_sec	Property of "dwell_times". String representation of an Integer. The actual dwell time at the stop, in seconds. Example: 87

Notes

Data can be queried for current date and the prior 90 days. A maximum time span of 7 days is allowed between from_datetime and to_datetime.

Example

https://performanceapi.mbta.com/developer/api/v2.1/dwells?api_key=wX9NwuHnZU2ToO7GmGR9uw&format=json&stop=70076&from_datetime=1457454139&to_datetime=1457454749

```
{
   "dwell_times":[
      {
         "route_id":"Red",
         "direction":"1",
         "arr_dt":"1457454384",
         "dep_dt":"1457454455",
         "dwell_time_sec":"71"
      },
      {
         "route_id":"Red",
         "direction":"1",
         "arr_dt":"1457454675",
         "dep_dt":"1457454749",
         "dwell_time_sec":"74"
      }
   ]
}
```

2.2.3 HEADWAYS

This query will return a list of departure headways (between the 'current' and 'previous' departures) as well as benchmark headways at a stop during the time period defined in the call. The user can optionally specify headways between trips served by a particular route or between trips serving a particular destination. Headways are flagged if they are above certain thresholds compared to the benchmark headways.

Special Parameters

Name	Description
stop	GTFS-compatible stop_id for the stop for which headways should be returned. Data type: String. Example: 70069
to_stop (optional)	GTFS-compatible stop_id for the destination stop for which headways between trips serving a particular destination should be returned. If to_stop_id is specified, route can not be specified. Data type: String. Example: 70069
route (optional)	GTFS-compatible route_id value for which headways between trips serving a particular route should be returned. If route is specified, departure headways for only that route will be returned. If route is specified, to_stop can not be specified. Data type: String. Example: Red
from_datetime	Start of the time period that the headways ('current' departure time at the stop) should fall within; must be provided in epoch time Data type: Integer, in epoch time. Example: 1429149600
to_datetime	End of the time period that the headways ('current' departure time at the stop) should fall within; must be provided in epoch time. Data type: Integer in epoch time. Example: 1429250399

Response Fields

Name	Description
headways	Root object of the feed
route_id	Property of "headways". String. The GTFS-compatible unique identifier for the route for which headways are returned. Example: Red
prev_route_id	Property of "headways". String. The unique GTFS-compatible unique identifier for the previous departure's route. Example: Red
direction	Property of "headways". String representation of a Bit (0 or 1). The GTFS-compatible direction value (1 or 0) for for which headways are returned. Example: 0
current_dep_dt	Property of "headways". String representation of an Integer. The current actual departure time at the stop, in epoch time. Example: 1429177779

Name	Description
previous_dep_dt	Property of "headways". String representation of an Integer. The previous actual departure time at the stop, in epoch time. Example: 1429177530
headway_time_sec	Property of "headways". String representation of an Integer. The headway between the current departure and the previous departure at the stop, in seconds. Example: 449
benchmark_headway_time_sec	Property of "headways". String representation of an Integer The average scheduled headway (during the 30-minute time slice in which this headway occurs) between the current departure and the previous departure at the stop, in seconds. Example: 270
threshold_flag_1 (optional)	Property of "headways". String 'threshold_id_01' if the difference between the headway_time_sec and the benchmark_headway_time_sec is above the threshold_id_01 (> Headway) otherwise not returned Example: threshold_id_01
threshold_flag_2 (optional)	Property of "headways". String 'threshold_id_02' if the difference between the headway_time_sec and the benchmark_headway_time_sec is above the threshold_id_02 (> Big Gap – defined as 1.5X the headway or the headway plus 3 minutes, whichever is smaller) otherwise not returned Example: threshold_id_02
threshold_flag_3 (optional)	Property of "headways". String 'threshold_id_03' if the difference between the headway_time_sec and the benchmark_headway_time_sec is above the threshold_id_03 (> 2X Headway) otherwise not returned Example: threshold_id_03

Notes

Data can be queried for current date and the prior 90 days. A maximum time span of 7 days is allowed between from_datetime and to_datetime. Service dates start at 3:00 AM. If headways are requested for the current service date only, from_datetime needs to be after the beginning of the service date, and to_datetime needs to be before the start of the next service_date. (There are no restrictions on the from_datetime and to_datetime parameters when requesting up to 7 days of headway data for any period prior to the current service date).

Example

https://performanceapi.mbta.com/developer/api/v2.1/headways?api_key=wX9NwuHnZU2ToO7GmG R9uw&format=json&stop=70076&from_datetime=1457455186&to_datetime=1457456986

```
{
    "headways":[
        {
            "route_id":"Red",
            "prev_route_id":"Red",
            "direction":"1",
            "current_dep_dt":"1457455918",
            "previous_dep_dt":"1457455185",
            "headway_time_sec":"733",
```

```
            "benchmark_headway_time_sec":"420",
            "threshold_flag_1":"threshold_id_01",
            "threshold_flag_2":"threshold_id_02"
        },
        {
            "route_id":"Red",
            "prev_route_id":"Red",
            "direction":"1",
            "current_dep_dt":"1457456181",
            "previous_dep_dt":"1457455918",
            "headway_time_sec":"263",
            "benchmark_headway_time_sec":"420"
        }
    ]
}
```

2.2.4 DAILYMETRICS

This query will return a list of the daily top line metrics for a route during the service dates defined in the call.

Special Parameters

Name	Description
route (optional)	GTFS-compatible route_id value for which metrics should be returned. Multiple route_ids can be input separated by commas. Data type: String. Example: Red
from_service_date	Start service date for which daily metrics should fall within; must be provided in YYYY-MM-DD format Example: 2018-09-04
to_service_date	End service date for which daily metrics should fall within; must be provided in YYYY-MM-DD format Example: 2018-09-04

Response Fields

Name	Description
daily_metrics	Root object of the feed
service_date	Property of "daily_metrics". String The service date for the metric. Example: 2018-09-04
route_id	Property of "daily_metrics". String. The GTFS-compatible unique identifier for the route for which metrics are returned. Example: Red
threshold_id	Property of "daily_metrics". String. The identifier for the threshold Example: threshold_id_01
threshold_type	Property of "daily_metrics". String. The type of threshold: wait_time_headway_based, travel_time Example: wait_time_headway_based

Name	Description
threshold_name	Property of "daily_metrics". String. The name of the threshold: 'Headway', 'Big Gap', '2X Headway', 'delayed < 3 min.', 'delayed < 6 min.', 'delayed < 10 min.' Example: Headway
time_period_type	Property of "daily_metrics". String. The type of time period for which the metrics are calculated: 'PEAK', 'OFF_PEAK' PEAK includes the AM and PM peak periods as specified in the Service Delivery Policy. OFF_PEAK includes all other times. Example: PEAK
metric_result	Property of "daily_metrics". String representation of a float The result of the passenger weighted metric, e.g. percent of passengers delayed longer than the benchmark headway Example: 0.9225

Notes

Data can be queried for current date and the prior 90 days. A maximum time span of 30 days is allowed between from_service_date and to_service_date. The from_service_date and to_service_date must be for dates in the past, i.e. not today. Service dates start at 3:00AM.

Passenger weights are estimated for each day and time period from the MBTA's Origin-Destination Matrix.

Example

https://performanceapi.mbta.com/developer/api/v2.1/dailymetrics?api_key=wX9NwuHnZU2ToO7GmGR9uw&format=json&route=red&from_service_date=2018-09-04&to_service_date=2018-09-04

```
{
    "daily_metrics":[
        {
        "service_date":"2018-09-04",
        "route_id":"Red",
        "threshold_id":"threshold_id_01",
        "threshold_type":"wait_time_headway_based",
        "threshold_name":"Headway",
        "time_period_type":"OFF_PEAK",
        "metric_result":"0.9445"
    },
    {
        "service_date":"2018-09-04",
        "route_id":"Red",
        "threshold_id":"threshold_id_01",
        "threshold_type":"wait_time_headway_based",
        "threshold_name":"Headway",
        "time_period_type":"PEAK",
        "metric_result":"0.9225"
    },
    {
        "service_date":"2018-09-04",
        "route_id":"Red",
        "threshold_id":"threshold_id_02",
        "threshold_type":"wait_time_headway_based",
        "threshold_name":"Big Gap",
        "time_period_type":"OFF_PEAK",
        "metric_result":"0.9921"
```

```
        },
        {
            "service_date":"2018-09-04",
            "route_id":"Red",
            "threshold_id":"threshold_id_02",
            "threshold_type":"wait_time_headway_based",
            "threshold_name":"Big Gap",
            "time_period_type":"PEAK",
            "metric_result":"0.9801"
        }
    ]
}
```

2.2.5 CURRENTMETRICS

This query will return a list of the current (last hour and current service date until current time) top line metrics for a route.

Special Parameters

Name	Description
route (optional)	GTFS-compatible route_id value for which metrics should be returned. Multiple route_ids can be input separated by commas. Data type: String. Example: Red

Response Fields

Name	Description
current_metrics	Root object of the feed
route_id	Property of "current_metrics". String. The GTFS-compatible unique identifier for the route for which metrics are returned. Example: Red
threshold_id	Property of "current_metrics". String. The identifier for the threshold Example: threshold_id_01
threshold_type	Property of "current_metrics". String. The type of threshold: wait_time_headway_based, travel_time Example: wait_time_headway_based
threshold_name	Property of "current_metrics". String. The name of the threshold: The name of the threshold: 'Headway', 'Big Gap', '2X Headway', 'delayed < 3 min.', 'delayed < 6 min.', 'delayed < 10 min.' Example: Headway
metric_result_last_hour	Property of "current_metrics". String representation of a float The result of the passenger weighted metric over the last hour, e.g. percent of passengers delayed longer than the benchmark headway Example: 0.9750

Name	Description
metric_result_current_day	Property of "current_metrics". String representation of a float The result of the passenger weighted metric from the start of the service date until the current time, e.g. percent of passengers delayed longer than the benchmark headway Example: 0.9750

Notes

Passenger weights are estimated for each day and time period from the MBTA's Origin-Destination Matrix.

Example

https://performanceapi.mbta.com/developer/api/v2.1/currentmetrics?api_key=wX9NwuHnZU2ToO7GmGR9uw&format=json&route=red

```
{
    "current_metrics":[
        {
            "route_id":"Red",
            "threshold_id":"threshold_id_01",
            "threshold_type":"wait_time_headway_based",
            "threshold_name":"Headway",
            "metric_result_last_hour":"0.8549",
            "metric_result_current_day":"0.9149"
        },
        {
            "route_id":"Red",
            "threshold_id":"threshold_id_02",
            "threshold_type":"wait_time_headway_based",
            "threshold_name":"Big Gap",
            "metric_result_last_hour":"0.9416",
            "metric_result_current_day":"0.9719"
        },
        {
            "route_id":"Red",
            "threshold_id":"threshold_id_03",
            "threshold_type":"wait_time_headway_based",
            "threshold_name":"2X Headway",
            "metric_result_last_hour":"0.9875",
            "metric_result_current_day":"0.9906"
        },
        {
            "route_id":"Red",
            "threshold_id":"threshold_id_04",
            "threshold_type":"travel_time",
            "threshold_name":"delayed < 3 min.",
            "metric_result_last_hour":"0.9920",
            "metric_result_current_day":"0.9798"
        },
        {
            "route_id":"Red",
            "threshold_id":"threshold_id_05",
            "threshold_type":"travel_time",
            "threshold_name":"delayed < 6 min.",
            "metric_result_last_hour":"1",
            "metric_result_current_day":"0.9945"
        },
        {
            "route_id":"Red",
```

```
        "threshold_id":"threshold_id_06",
        "threshold_type":"travel_time",
        "threshold_name":"delayed < 10 min.",
        "metric_result_last_hour":"1",
        "metric_result_current_day":"0.9977"
      }
   ]
}
```

2.2.6   EVENTS

This query returns a list of arrival and departure events during the time period defined in the call.

Special Parameters

Name	Description
route (optional)	GTFS-compatible route_id value for which events should be returned. If this is not included, events for all routes during the time period will be returned. Date type: String. Example: Orange
direction (optional)	GTFS-compatible direction_id value for which events should be returned. If this is not included, events for all directions during the time period will be returned. Data type: Integer. Example: 1
stop (optional)	GTFS-compabile stop_id value for which events should be returned. If this is not included, events for all stops during the time period will be returned. Data type: String. Example: 70027
vehicle_label	Human-readable, publicly visible identifier for the vehicle. Data type: String. Example:1310
from_datetime	Start of the time period that the event times should fall within; must be provided in epoch time. Data type: Integer, in epoch time. Example: 1537812000
to_datetime	End of the time period that the event times should fall within; must be provided in epoch time. Data type: Integer, in epoch time. Example: 1537819200

Response Fields

Name	Description
events	Root object of the feed
service_date	Property of "events". String. The service date for the event. Example: 2018-09-24

Name	Description
route_id	Property of "events". String. The GTFS-compatible unique identifier for the route for which events are returned. Example: Orange
trip_id	Property of "events". String. The GTFS-compatible unique identifier for the trip for which events are returned. Example: 37940083
direction_id	Property of "events". String representation of a Bit (0 or 1). The GTFS-compatible direction value for which events are returned. Example: 1
stop_id	Property of "events". String. The GTFS-compatible unique identifier for the stop for which events are returned. Example: 70027
stop_name	Property of "events". String. The GTFS-compatible stop name for the stop for which events are returned. Example: North Station
stop_sequence	Property of "events". String representation of Integer. The GTFS-compatible order of the stop for the trip for which events are returned. Example: 130
vehicle_id	Property of "events". String. The identifier for the vehicle performing the trip for which events are returned. Example: O-54583BB7
vehicle_label	Property of "events". String. Human-readable, publicly visible identifier for the vehicle. Example: 1310
event_type	Property of "events". String. The type of event: 'ARR' for arrival, and 'DEP' for departure, 'PRA' for predicted arrival, and 'PRD' for predicted departure. PRA and PRD events occur when the Performance system is relatively sure that a train actually made the indicated movement at the indicated station, but the system did not observe an "actual" event from the realtime system. In that case, we use the last available prediction for the given event as a reasonable proxy. We often lack actual ARR events at terminals because the realtime system is designed for tracking trains that passengers want to board, not necessarily trains that have already arrived at a terminal station. The instant a train arrives at a terminal station (e.g. arriving northbound at Oak Grove), the MBTA-performance system may no longer be able to track its location. In some cases, we are not able to fill in a PRA event at all, so some types of analysis are less accurate at terminals. Depending on your objectives, you may wish to use the second-to-last station as a proxy. Example: ARR
event_time	Property of "events". String representation of Integer. The time of the event, in epoch time. Example: 1537818742

Name	Description
event_time_sec	Property of "events". String representation of Integer. The time of the event, in seconds after midnight. Example: 57142

Notes

Data can be queried for current date and the prior 90 days. A maximum time span of one (1) service day is allowed between from_datetime and to_datetime. Service dates start at 3:00 AM.

Example

https://performanceapi.mbta.com/developer/api/v2.1/events?api_key=wX9NwuHnZU2ToO7GmGR9uw&format=json&from_datetime=1537812000&to_datetime=1537819200&stop=70027&route=Orange

```
{
   "events":[
      {
         "service_date":"2018-09-24",
         "route_id":"Orange",
         "trip_id":"37940083",
         "direction_id":"1",
         "stop_id":"70027",
         "stop_name":"North Station",
         "stop_sequence":"130",
         "vehicle_id":"O-54583BB7",
         "vehicle_label":"1310",
         "event_type":"ARR",
         "event_time":"1537818742",
         "event_time_sec":"57142"
      },
      {
         "service_date":"2018-09-24",
         "route_id":"Orange",
         "trip_id":"37940403",
         "direction_id":"1",
         "stop_id":"70027",
         "stop_name":"North Station",
         "stop_sequence":"130",
         "vehicle_id":"O-545857E3",
         "vehicle_label":"1207",
         "event_type":"ARR",
         "event_time":"1537812490",
         "event_time_sec":"50890"
      }
   ]
}
```

2.2.7 PASTALERTS

This query returns a list of alerts that were in effect during the time period defined in the call.

Special Parameters

Name	Description
route (optional)	GTFS-compatible route_id value for which alerts should be returned. If this is not included, alerts for all routes during the time period will be returned. Date type: String. Example: Red
stop (optional)	GTFS-compabile stop_id value for which alerts should be returned. If this is not included, alerts for all stops during the time period will be returned. Data type: String. Example: 70097
trip (optional)	GTFS-compatible trip_id value for which alerts should be returned. If this is not included, alerts for all trips during the time period will be returned. Data type: String. Example: CR-Weekday-Fall-16-589
from_datetime	Start of the time period that the alert effect period should fall within; must be provided in epoch time. Data type: Integer, in epoch time. Example: 1534338000
to_datetime	End of the time period that the alert effect period should fall within; must be provided in epoch time. Data type: Integer, in epoch time. Example: 1534348800
include_all_versions (optional)	Boolean indicating whether all versions of the alert should be returned, or only the versions that are live during the input time period. If set to 1, all versions of the alert are returned. If omitted or set to 0, only versions that were live during the input time period are returned. Data type: Bit (0 or 1) Example: 0

Response Fields

Name	Description
past_alerts	Root object of the feed
alert_id	Property of "past_alerts". String representation of Integer. The unique identifier for the alert. Example: 262232
alert_versions	Child object of each "past_alerts" object. Contains information about the versions of the alert. A new alert version is created when any of the alert's properties has changed.
version_id	Property of each "alert_versions" object. String representation of Integer. The unique identifier for the alert version. Example: 1
valid_from	Property of each "alert_versions" object. String representation of Integer. Starting date and time the alert version is live, in epoch time. Example: 1534208045

Name	Description
valid_to	Property of each "alert_versions" object. String representation of Integer. End date and time the alert version is live, in epoch time. Example: 1534832960
cause	Property of each "alert_versions" object. String. GTFS-realtime-compatible code for the cause. Example: CONSTRUCTION
effect	Property of each "alert_versions" object. String. GTFS-realtime-compatible code for the effect. Example: UNKNOWN_EFFECT
header_text	Property of each "alert_versions" object. String. A brief summary of the situation (GTFS-realtime-compatible). Example: North Quincy Parking Notice: Due to construction, the Hancock Street entrance to the easterly parking lot is temporarily closed to vehicles through Monday, August 20.
description_text	Property of each "alert_versions" object. String. Additional details (GTFS-realtime-compatible). Example: Please enter the parking lot through the temporary entrance at the northern end of the lot.\r\n\r\n\nAffected routes:\r\nRed Line
url (optional)	Property of each "alert_versions" object. String. A URL for extra detail (GTFS-realtime-compatible). Example: www.mbta.com
informed_entity	Child object of each "alert_versions" object. Contains information about the services or facilities affected by this alert.
agency_id (optional)	Property of "informed_entity". String. The unique GTFS-compatible identifier for the agency. Example: 1
route_id (optional)	Property of "informed_entity". String. The unique GTFS-compatible identifier for the route. Example: Red
route_type (optional)	Property of "informed_entity". String representation of Integer. GTFS-compatible code for the route type (i.e. mode). Example: 1
trip_id (optional)	Property of "informed_entity". String. The unique GTFS-compatible identifier for the trip. Example: CR-Weekday-Spring-18-105
stop_id (optional)	Property of "informed_entity". String. The unique GTFS-compatible identifier for the stop. Example: 70097
active_period	Child object of each "alert_versions" object. Contains information about all time periods for which the alert will be in effect (GTFS-realtime-compatible).
start	Property of "active_period". String representation of Integer. Date and time of the start of the active period, in epoch time. Example: 1534208025
end (optional)	Property of "active_period". String representation of Integer. Date and time of the end of the active period, in epoch time. Can be empty if active period end is not known. Example: 1534833000

Notes

Only alerts that were in effect starting November 8, 2017 are included in the response.

A maximum time span of 31 days is allowed between from_datetime and to_datetime.

Example

https://performanceapi.mbta.com/developer/api/v2.1/pastAlerts?api_key=wX9NwuHnZU2ToO7G
mGR9uw&format=json&from_datetime=1534338000&to_datetime=1534348800&route=Red

```json
{
    "past_alerts":[
        {
            "alert_id":"262232",
            "alert_versions":[
                {
                    "version_id":"1",
                    "valid_from":"1534208045",
                    "valid_to":"1534832960",
                    "cause":"CONSTRUCTION",
                    "effect":"UNKNOWN_EFFECT",
                    "header_text":"North Quincy Parking Notice: Due to construction, the
Hancock Street entrance to the easterly parking lot is temporarily closed to vehicles
through Monday, August 20.",
                    "description_text":"Please enter the parking lot through the temporary
entrance at the northern end of the lot.\r\n\r\nAffected routes:\r\nRed Line",
                    "informed_entity":[
                        {
                            "agency_id":"1",
                            "route_id":"Red",
                            "route_type":"1",
                            "stop_id":"70097"
                        },
                        {
                            "agency_id":"1",
                            "route_id":"Red",
                            "route_type":"1",
                            "stop_id":"70098"
                        }
                    ],
                    "active_period":[
                        {
                            "start":"1534208025",
                            "end":"1534833000"
                        }
                    ]
                }
            ]
        }
    ]
}
```

3. ABOUT THIS DOCUMENT

3.1 Version History

Version #	Date	Change Author	Description of Change
0.9	2016/03/28	Laura Riegel	Original draft of document
0.9.1	2016/04/14	Laura Riegel	Updated Notes section of daily_metrics call to define service dates and limit to dates in the past
0.9.2	2017/12/06	Farah Machlab	Added sections for new API calls.
0.9.3	2018/09/07	Farah Machlab	Updated getPastAlerts API call to include version information and added time_period_type to dailyMetrics API call.
0.9.4	2018/09/21	Farah Machlab	Updated getEvents API call to include vehicle_label as a parameter and in the response.
0.9.5	2018/10/30	Laura Riegel	Updated events API call description with 'PRA' and 'PRD' events.
0.9.6	2019/03/08	Sam Hickey	Changed example API calls to use https://performanceapi.mbta.com.
0.9.7	2020/08/31	Laura Riegel	Removed dailypredictionmetrics and predictionsmetrics API calls from documentation as these calls have been discontinued