Parking Rates REST API Documentation

How to Use Parking Rates REST API

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Table of Contents

INTRODUCTION

Overview of Parking Rates REST API

The Parking Rates REST API allows users to request parking rate prices for a specific date and time range of their choosing. This documentation is intended to be a guide for users who want to utilize the web service endpoints that are hosted by this API. There are three web service endpoints that will be described in the following pages of this document.

SERVICES

Update Parking Rate Information:

Description

Removes previous parking rates and is reloaded with the modified rates JSON given to the service

Service Type

RESTful web service

Service URI

HTTP Method: PUT

Resource Path: /rates

Transport Protocol

HTTP

Input Type

JSON

Input (List of rates required; see service behavior and example JSON below table)

Name	Description	Type / Format	Required
days	Days of the week the rate pertains to	Characters / separated by commas and can only be in the following format: **mon, tues, wed, thurs, fri, sat, sun**	Yes
times	Range of times during the day	Alphnumeric / HHmm-HHmm format required	Yes
tz	Timezone	Characters / must adhere to the current version of the timezone database	Yes
price	Cost of parking	Numeric	Yes

Example Input JSON

```json
{
  "rates": [
    {
      "days": "mon,tues,thurs",
      "times": "0900-2100",
      "tz": "America/Chicago",
      "price": 1500
    },
    {
      "days": "fri,sat,sun",
      "times": "0900-2100",
      "tz": "America/Chicago",
      "price": 2000
    },
    {
      "days": "wed",
      "times": "0600-1800",
      "tz": "America/Chicago",
      "price": 1750
    },
    {
      "days": "mon,wed,sat",
      "times": "0100-0500",
      "tz": "America/Chicago",
      "price": 1000
    },
    {
      "days": "sun,tues",
      "times": "0100-0700",
      "tz": "America/Chicago",
      "price": 925
    }
  ]
}
```

Output Type

> **JSON**

Output

> Successfully updated parking rates

Service Behavior

- Service will remove previously loaded parking rates and be reloaded with the input JSON.

- If the service is unable to load JSON rates service will return with a failure status code.

- If the service successfully loaded parking rates the service will return with a success status code with a successful output message.

Get Parking Rate Information:

Description

Returns all available parking rates as JSON

Service Type

RESTful web service

Service URI

HTTP Method: GET

Resource Path: /rates

Transport Protocol

HTTP

Input Type

None

Input

None

Output Type

JSON

Output (List of rates is outputted see service behavior and example JSON below table)

Name	Description	Type / Format	Required
days	Days of the week the rate pertains to	Characters / separated by commas and will only ever be in the following format: **mon, tues, wed, thurs, fri, sat, sun**	Yes
times	Range of times during the day	Alphnumeric / HHmm-HHmm format required	Yes
tz	Timezone	Characters / must adhere to the current version of the timezone database	Yes
price	Cost of parking	Numeric	Yes

Example Output JSON

```json
{
  "rates": [
    {
      "days": "mon,tues,thurs",
      "times": "0900-2100",
      "tz": "America/Chicago",
      "price": 1500
    },
    {
      "days": "fri,sat,sun",
      "times": "0900-2100",
      "tz": "America/Chicago",
      "price": 2000
    },
    {
      "days": "wed",
      "times": "0600-1800",
      "tz": "America/Chicago",
      "price": 1750
    },
    {
      "days": "mon,wed,sat",
      "times": "0100-0500",
      "tz": "America/Chicago",
      "price": 1000
    },
    {
      "days": "sun,tues",
      "times": "0100-0700",
      "tz": "America/Chicago",
      "price": 925
    }
  ]
}
```

Service Behavior

- Service will return all available parking rates as JSON.

- If the service is unable to return available rates service will return with a failure status code.

- If the service successfully returns available parking rates the service will return with a success status code with the output as JSON.

Get Parking Price By Date And Time Range:

Description

Returns a price based on the requested time range.

Service Type

RESTful web service

Service URI

HTTP Method: GET

Resource Path: /price?start=2015-07-01T07:00:00-05:00&end=2015-07-01T12:00:00-05:00

Transport Protocol

HTTP

Input Type

Query Parameters (see Resource Path above for example)

Input

Name	Description	Type / Format	Required
start	The start date and time of range to get parking price for	Date and Time / as ISO-8601 with timezones (see Resource Path above for example)	Yes
end	The end date and time of range to get parking price for.	Date and Time / as ISO-8601 with timezones (see Resource Path above for example)	Yes

Output Type

JSON

Output

Name	Description	Type / Format	Required
price	The price of parking based on the date / time range	Numeric	Yes

Example Output JSON

```
{
    "price": 1750
}
```

Service Behavior

- Service will return price as JSON based on the time range the user requests.

- If user passes an incorrectly formatted date/time range the service will return a not found (404) status.

- If the service is unable to return a price the service will return the JSON price as 'unavailable'. Example `{"price": "unavailable"}`