

Real-time Rail Data Web Services (Rev 5)

Web Service

This is the test web service you can use to develop a new API interface to the real-time data. The new API will not restrict you to a static IP address and will allow any request with the appropriate key to access the data.

Web Services Production URL:

<http://traindata.njtransit.com:8090/NJTTrainData.asmx>

Web Services Test URL:

http://njttraindata_tst.njtransit.com:8090/njttraindata.asmx

The web services needs to be added into the application as a web reference and then you can include the desired parameters.

There are username and password parameters:

Send your Email, Username, and Password that you would like to use in test and production to ProductionPasscomm@njtransit.com and we will add you the real-time data feed list. Please pass username and password parameters first, then call the methods, please see detail below:

username and password parameters:

`UserCredentials.userName`, `UserCredentials.password`

There are 3 types of method calls:

- [getStationListXML](#) (list all stations in XML format)
- [getTrainScheduleJSON](#) (list train schedule for a given station in JSON format, data is much the same as DepartureVision)
- [getTrainScheduleXML](#) (list train schedule for a given station in XML format, data is much the same as DepartureVision)

Below is a simple sample code in C# (service1 is your web reference name):

```
service1.UserCredentials user = new service1.UserCredentials();
user.userName = "your username here";
user.password = "your password here";

service1.ServiceExternal service = new service1.ServiceExternal();
service.UserCredentialsValue = user;

try
{
    XmlNode doc1 = service.getTrainScheduleXML("NP");
}
catch
{
}
```

```
finally
{
}
```

The formats allow 3rd parties to have access to full screen, banner, and inline messages that are applied to a station or a trainID. Soon, it also will provide approximate GPS location data. (Some error has intentionally been introduced.) The new format also supports JASON as well as XML formats. Older formats will only be supported until June 2013.

Web calls are for the real-time data and not for scheduled trips for trains that have not left their origin. Third party should not be constantly requesting data but only when there is a specific request. For schedule data beyond the next 19 departures from a station the developer should be using the GTFS data.

If you have questions about the real-time data interface you can contact us at ProductionPasscomm@njtransit.com. Any questions about the GTFS schedule data should be made to the Customer Service Helpdesk from 8:30am to 5pm at **(973) 275-5555**.

If a trainID has an "A" in front of it, it is an Amtrak train and S is a Septa train.

When using the track data at a few stations there is a translation between railroad track that is provided in the data and the public track that the public sees at the station. Use the table below for those translations.

<u>TRACK</u>	<u>TRANSLATION</u>	<u>STATION</u>
Single	1	Lebanon
2	1	Metropark
B	2	Montclair State U
Single	1	Montclair State U
0	A	Newark Airport
4	E	Secaucus Lower Lvl
2	F	Secaucus Lower Lvl
3	H	Secaucus Lower Lvl
1	G	Secaucus Lower Lvl
Single	S	Summit

<u>Station Position</u>	<u>TRANSLATION</u>
0	Origin Station
1	Valid Stop between Origin and Terminate Station
2	Terminate Station

Schema for Real-time Web Service.

(Below is for getTrainScheduleXML. getTrainScheduleJSON returns the same XML in JSON format)

Please note:

When Full Screen Message is on, schedule data will be blocked.

When Full Screen Message is not on, Banner Message and Inline Message may or may not have data, they show with schedule data.

Schedule data matches Departure Vision. There is a limit on total schedule records, Data starts with current time, gives 19 records.

Below field gives train line information:

<LINE>NJCL</LINE>

Below fields may or may not show depends on Amtrak Data:

<PICKUP>Pick Up Only</PICKUP>

<DROPOFF>Discharge Only</DROPOFF>

Below fields might be empty, this feature is at “in progress” mode.

When fields are not empty, GPSTIME is the timestamp when GPS position values were captured.

<GPSLATITUDE></GPSLATITUDE>

<GPSLONGITUDE></GPSLONGITUDE>

<GPSTIME></GPSTIME>

Case 1) When Full Screen Message:

<STATION><FULLSCREENMSG>This is a test of full screen
</FULLSCREENMSG></STATION>

Case 2) When full screen message is not on:

<STATION>

<STATION_2CHAR>NA</STATION_2CHAR>

<STATIONNAME>Newark Airport</STATIONNAME>

<BANNERMSG>This is a test of the banner messages with only one station, Airport,for
DepartureVision.
This is a test of the banner messages for DepartureVision.
</BANNERMSG>

<ITEMS>

<ITEM>

<ITEM_INDEX>0</ITEM_INDEX>

<SCHED_DEP_DATE>16:01:45 12/04/2012</SCHED_DEP_DATE>

<DESTINATION>NY Penn -SEC</DESTINATION>

<TRACK>A</TRACK>

<LINE>NJCL</LINE>

<TRAIN_ID>3256</TRAIN_ID>

<STATUS>in 1 Min</STATUS>

<BACKCOLOR>CornflowerBlue</BACKCOLOR>

<FORECOLOR>white</FORECOLOR>

<SHADOWCOLOR>black</SHADOWCOLOR>

<GPSLATITUDE></GPSLATITUDE>

<GPSLONGITUDE></GPSLONGITUDE>

<GPSTIME></GPSTIME>

<TRAIN_LINE>North Jersey Coast Line</TRAIN_LINE>

<STATION_POSITION>1</STATION_POSITION>
<LINEABBREVIATION>NJCL</LINEABBREVIATION>
< INLINEMSG >This is a test for Inline MSG</ INLINEMSG >
<STOPS>
<STOP>
<NAME>Newark Penn Station</NAME>
<TIME>12/4/2012 4:06:46 PM</TIME>
<PICKUP>Pick Up Only</PICKUP>
</STOP>
<STOP>
<NAME>Secaucus Upper Lvl</NAME>
<TIME>12/4/2012 4:14:16 PM</TIME>
<DROPOFF>Discharge Only</DROPOFF>
</STOP>
<STOP>
<NAME>New York Penn Station</NAME>
<TIME>12/4/2012 4:27:01 PM</TIME>
</STOP>
</STOPS>
</ITEM>
</ITEMs>
</STATION>

STATION NAME	STATION 2CHAR
Aberdeen-Matawan	AM
Absecon	AB
Allendale	AZ
Allenhurst	AH
Anderson Street	AS
Annandale	AN
Asbury Park	AP
Atco	AO
Atlantic City Rail Terminal	AC
Avenel	AV
Baltimore Station	BL
Basking Ridge	BI
Bay Head	BH
Bay Street	MC
Belmar	BS
Berkeley Heights	BY
Bernardsville	BV
Bloomfield	BM
Boonton	BN
Bound Brook	BK
Bradley Beach	BB
Brick Church	BU
Bridgewater	BW
Broadway-Fairlawn	BF
BWI Thurgood Marshall Airport	BA
Campbell Hall	CB
Chatham	CM
Cherry Hill	CY
Clifton	IF
Convent Station	CN
Cranford	XC
Delawanna	DL
Denville	DV
Dover	DO
Dunellen	DN
East Orange	EO
Edison	ED
Egg Harbor City	EH
Elberon	EL
Elizabeth	EZ
Emerson	EN
Essex Street	EX
Fanwood	FW
Far Hills	FH
Finderne	FE
Garfield	GD
Garwood	GW
Gillette	GI
Gladstone	GL
Glen Ridge	GG

Glen Rock	RS
Glen Rock Boro Hall	GK
Great Notch	GA
Hackettstown	HQ
Hamilton	HL
Hammonton	HN
Harriman	HR
Hawthorne	HW
Hazlet	HZ
High Bridge	HG
Highland Avenue	HI
Hillsdale	HD
Hoboken	HB
Hohokus	UF
Jersey Avenue	JA
Kingsland	KG
Lake Hopatcong	HP
Lebanon	ON
Lincoln Park	LP
Linden	LI
Lindenwold	LW
Little Falls	FA
Little Silver	LS
Long Branch	LB
Lyndhurst	LN
Lyons	LY
Madison	MA
Mahwah	MZ
Manasquan	SQ
Maplewood	MW
Metro Park	MP
Metuchen	MU
Middleton NJ	MI
Middletown NY	MD
Millburn	MB
Millington	GO
Montclair State U	UV
Monmouth Park	MK
Montclair Heights	HS
Montvale	ZM
Morris Plains	MX
Morristown	MR
Mount Olive	OL
Mount Tabor	TB
Mountain Avenue	MS
Mountain Lakes	ML
Mountain Station	MT
Mountain View	MV
Murray Hill	MH
Nanuet	NN
Netcong	NT
Netherwood	NE
New Brunswick	NB

New Carrollton Station	NC
New Providence	NV
Newark Airport	NA
Newark Broad Street	ND
Newark Penn Station	NP
North Branch	OR
North Elizabeth	NZ
New Bridge Landing	NH
Oradell	OD
Orange	OG
Ottisville	OS
Park Ridge	PV
Passaic	PS
Paterson	RN
Peapack	PC
Pearl River	PQ
New york Penn Station	NY
Pennsauken	PN
Perth Amboy	PE
Philadelphia	PH
Plainfield	PF
Plauderville	PL
Point Pleasant Beach	PP
Port Jervis	PO
Princeton	PR
Princeton Junction	PJ
Radburn-Fairlawn	FZ
Rahway	RH
Ramsey	RY
Ramsey Rt 17	17
Raritan	RA
Red Bank	RB
Ridgewood	RW
River Edge	RG
Roselle Park	RL
Rutherford	RF
Salisbury Mills-Cornwall	CW
Secaucus Upper Lvl	SE
Secaucus Lower Lvl	TS
Short Hills	RT
Sloatsburg	XG
Somerville	SM
South Amboy	CH
South Orange	SO
Spring Lake	LA
Spring Valley	SV
Stirling	SG
Suffern	SF
Summit	ST
Teterboro	TE
Towaco	TO
Trenton	TR
Tuxedo	TC

Union	US
Upper Montclair	UM
Waldwick	WK
Walnut Street	WA
Watchung Avenue	WG
Watsessing Avenue	WT
Washington Station	WS
Wayne-Route 23	23
Westfield	WF
Westwood	WW
Wilmington Station	WI
White House	WH
Wood Ridge	WR
Woodbridge	WB
Woodcliff Lake	WL