

Caltrans PeMS CSV Traffic Format

The PeMS CSV data format described below is used to forward real-time traffic data to a PeMS server.

Each station observation is delivered to the PeMS server via a single UDP datagram that contains a single line of comma separated values:

Example CSV line:

```
1018510,3,15,60,3,15,70,3,15,80,3,2010-12-10 09:06:43
```

Fields:

```
station_id, number_of_lanes, lane1_data, lane2_data, ..., timestamp
```

Where

- `station_id` : PeMS station id,
- `number_of_lanes` : integer (≥ 1),
- `lane_data` : repeat the following triple for each lane:
 - `flow` : vehicles counted in 30-seconds (≥ 0) or empty,
 - `speed` : integer, mph (≥ 0), or empty,
 - `occupancy` : integer (≥ 0 and ≤ 1000), or empty.
- `timestamp` : local time as yyyy-MM-dd HH:mm:ss

Additional Information

- Station observations are reported every 30 seconds.
- There are no special line terminator requirements.
- If a value for flow, speed, or occupancy is missing, it should be reported as an empty string.
- If an entire observation is missing (e.g. comm problems) then an observation for that 30 second interval should not be sent.
- There should be no spaces except in the `timestamp` field.