

SpeedLane Pro Importing Traffic Data into MS2 Traffic Count Database System (TCDS)

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Purpose

This document provides details on how to **export per-vehicle traffic data from Houston Radar** SpeedLane Pro Traffic Radars into a format that can be imported directly into MS2 Traffic Count Database System (TCDS).

Information is exported in MS2 TCDS per-vehicle XML Format

The following information is exported

- 1. MS2 Location ID The Location ID is used to map the Traffic Data generated by the Radar into the MS2 TCDS.
- 2. For each vehicle, the following information is included
 - a. Lane Number (1 to 16)
 - b. Lane Travel Direction (North, East, West, South, North-east, North-west, South-east, South-west)
 - c. Timestamp when Radar logged the vehicle
 - d. Speed (in mph)
 - e. Length (in feet)

Here is a snippet of the XML file:

<pre><?xml version="1.0" encoding="utf-8"?></pre>
<pre><ms2data xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="</pre"></ms2data></pre>
" <u>http://www.w3.org/2001/XMLSchema-instance</u> "
MS2Version="1.0">
<pvrdata></pvrdata>
<metadata< td=""></metadata<>
LengthUnits="ft"
SpeedUnits="mph"
SensorType="Microwave"
StartDateTime="2020-08-01T00:00:00.000"
EndDateTime="2020-08-31T23:59:59.999">
<custom< td=""></custom<>
Vendor="Houston Radar LLC"
Product="SpeedLane Pro" />
-
<vehiclerecords></vehiclerecords>
<vehiclerecord< td=""></vehiclerecord<>
Timestamp="2020-08-01T00:37:40.000"
MS2LocationId="Station3456"
MS2LaneNumber="2"
Speed="38"
MS2DirectionCode="SB"
TotalLength="9" />
<vehiclerecord< td=""></vehiclerecord<>
Timestamp="2020-08-01T00:54:08.000"
MS2LocationId="Station3456"
MS2LaneNumber="2"
Speed="38"
MS2DirectionCode="SB"
TotalLength="9" />

Exporting Traffic Data into MS2 TCDS per-vehicle XML Format

- 1. Set the MS2 Location ID for the Project. You can do this in one of two ways:
 - a. When you are creating a new project, enter the MS2 Location ID in the **Station ID** Field. The **Station ID** field is an alphanumeric field with a default value of 1.

New Project	Recent Projects - Projects	Refresh Projects	Connect To Radar Connect	Import Data From File	Import Data From Radar Data	Export Data *	Configuration Set	Setup Remote Radars tings
Pro	jects	Projects	ut the seconds		0			
	New Pro or	New Project w Project Nar ject Address	: ne					
	Sta	tion ID:	1	5		ОК	Ca	ncel

b. If you already have a project and want to change the MS2 Location ID, open the project and edit the MS2 Location/Station ID in the Project Settings. Click on the **OK** button to save your changes.



- 2. Change Export Data Format
 - a. Click on the **Export Data** button dropdown. Select MS2 from the dropdown.



3. Set Lane Travel Direction and remap Lane Numbers for all the lanes.

a. Click on Lane Configuration and set the Travel Direction for each Lane. All the lanes should have a Travel Direction selected.

JulieRiversDr	SpeedLar	ne									
Date Selection View Mana		nage Imported Data Lane Configu		e Configuration	Vehide Co	onfiguration					
Lane Number	Lane (Fee	e start et)		Lane stop (Feet)	Nar	P		Travel Direction		MS2 Lane Number	
L1	79			91	Lan	1		North	\sim	1	
L2	91			103	Lan	2		North	\sim	2	
L3	103			115	Lar	3	~	South	\sim	2	
L4	115			127	Lar	4		South	\sim	1	
User Defined	Lane Gro	oups									
Groups	L1 L2	L3	L4	Name							
Add New (Group		Dele	te Group							
										OK	Cancel

- b. Remap the Lane Number for each Lane to MS2 Lane Number and save your changes by clicking on the OK buton. The Radar and MS2 TCDS use different Lane Numbering Conventions:
 - Radar: The lane closest to the Radar is Lane 1 and increase sequentially. For a 4-lane road, lane numbers are marked as Lane 1 (nearest the Radar), Lane 2, Lane 3, Lane 4 (furthest from Radar).
 - MS2 TCDS: Lanes are numbered in ascending order from the curb to the median. On a 4 Lane Road with 2 lanes going North and 2 going South, Northbound Lanes are 1 and 2. Southbound Lanes are 1 and 2. Lanes 1 are near the curb. Lane 2 is near the median.

JulieRiversDr	SpeedLane						
Date Selectio	n View Manage	Imported Data	Lane Configuration	Vehide C	onfiguration		
Lane Number	Lane start (Feet)	Lane stop (Feet)	Name		Travel Direction		MS2 Lane Number
L1	79	91	Lane 1		North	\sim	1 -
L2	91	103	Lane 2		North	\sim	2 🤃
L3	103	115	Lane 3		South	~	2
L4	115	127	Lane 4		South	\sim	1
User Defined	Lane Groups						
Groups	L1 L2 L3 L4	Name					
Add New 0	Group Dele	te Group					4
							OK Cancel

- 4. Export per-vehicle data in MS2 per-vehicle XML format.
 - a. Select one or more days from the Date Selection View and click on the **Export Data** Icon to export the per-vehicle information to an XML file in the MS2 TCDS per-vehicle XML format.



5. Import the XML File generated by StatsAnalyzer into MS2 TCDS.

Example MS2 TCDS Example

JulieRiversDrSpeedLane_From_2020-08-01_To_2020-08-31.zip

Revision History

- 1. Version 1.0, May 27, 2021 Initial Release
- 2. Version 1.1, August 11, 2021
 - a. Add details on remapping lanes to MS2 Lane Numbers.
 - b. Update XMLZip file with correct Start/End Timestamp