

carmanah MX Series
carmanah.com

MX TRAFFIC ANALYZER REPORT

Connected Radar Speed Signs

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="background-color: #002060; color: white;">PROFILE</th> </tr> </thead> <tbody> <tr><td>System</td><td>Melchiosin Rd NB</td></tr> <tr><td>Serial #</td><td></td></tr> <tr><td>Location</td><td>48.41974, -123.48503</td></tr> <tr><td>Carmanah Model</td><td>SPEEDCHECK-MX <small>Includes stealth mode and up to 200K individual vehicle data points</small></td></tr> <tr><td>Report date</td><td>01 May 2025 14:17</td></tr> <tr><td>Start of log</td><td>15 Mar 2025 14:08</td></tr> <tr><td>End of log</td><td>04 Apr 2025 12:26</td></tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="background-color: #002060; color: white;">INCLUDED WITH EVERY SYSTEM</th> </tr> </thead> <tbody> <tr> <td style="font-size: 0.8em;">MX Subscriptions</td> <td>3 years out-of-the-box remote connectivity with MX Lite. See all MX subscriptions.</td> </tr> <tr> <td style="font-size: 0.8em;">MX Cloud</td> <td>MX Cloud for remote health status monitoring, email/SMS alerts, scheduling, asset management, programming and more</td> </tr> <tr> <td style="font-size: 0.8em;">MX Field App</td> <td>Bluetooth® mobile app for on-site setup, local access to default settings, calendar scheduling, system health status and more</td> </tr> <tr> <td style="font-size: 0.8em;">MX Traffic Analyzer</td> <td>Software to chart data collected by SPEEDCHECK-MX</td> </tr> <tr> <td style="font-size: 0.8em;">Support</td> <td>24/7 access to Carmanah's online Product Support Center</td> </tr> </tbody> </table> <p style="font-size: 0.7em; margin-top: 5px;"> <small>Specifications subject to local environmental conditions, and may be subject to change. All Carmanah products are manufactured in facilities that are certified to ISO quality standards. "Carmanah" and Carmanah logo are trademarks of Carmanah Technologies Corp. © 2025, Carmanah Technologies Corp. Document: Carmanah_MX_Traffic_Analyzer_Report_RevA</small> </p>	PROFILE		System	Melchiosin Rd NB	Serial #		Location	48.41974, -123.48503	Carmanah Model	SPEEDCHECK-MX <small>Includes stealth mode and up to 200K individual vehicle data points</small>	Report date	01 May 2025 14:17	Start of log	15 Mar 2025 14:08	End of log	04 Apr 2025 12:26	INCLUDED WITH EVERY SYSTEM		MX Subscriptions	3 years out-of-the-box remote connectivity with MX Lite. See all MX subscriptions.	MX Cloud	MX Cloud for remote health status monitoring, email/SMS alerts, scheduling, asset management, programming and more	MX Field App	Bluetooth® mobile app for on-site setup, local access to default settings, calendar scheduling, system health status and more	MX Traffic Analyzer	Software to chart data collected by SPEEDCHECK-MX	Support	24/7 access to Carmanah's online Product Support Center	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>86101</p> <div style="border: 1px solid #ccc; padding: 5px; width: 80px; margin: auto;"> Total Vehicles </div> </div> <div style="text-align: center;"> <p>4320</p> <div style="border: 1px solid #ccc; padding: 5px; width: 80px; margin: auto;"> Daily Average Vehicles </div> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>12862</p> <div style="border: 1px solid #ccc; padding: 5px; width: 80px; margin: auto;"> Compliant Vehicles </div> </div> <div style="text-align: center;"> <p>73239</p> <div style="border: 1px solid #ccc; padding: 5px; width: 80px; margin: auto;"> Non-compliant Vehicles </div> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>15%</p> <div style="border: 1px solid #ccc; padding: 5px; width: 80px; margin: auto;"> Compliance Rate <small>Using speed limit(s) set on system</small> </div> </div> <div style="text-align: center;"> <p>51 KPH</p> <div style="border: 1px solid #ccc; padding: 5px; width: 80px; margin: auto;"> <p style="font-size: 1.2em; font-weight: bold;">85%</p> <p style="font-size: 0.8em;">85th Percentile</p> </div> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>40 KPH</p> <div style="border: 1px solid #ccc; padding: 5px; width: 80px; margin: auto;"> Average Speed </div> </div> <div style="text-align: center;"> <p>96 KPH</p> <div style="border: 1px solid #ccc; padding: 5px; width: 80px; margin: auto;"> Fastest Speed </div> </div> </div>
PROFILE																													
System	Melchiosin Rd NB																												
Serial #																													
Location	48.41974, -123.48503																												
Carmanah Model	SPEEDCHECK-MX <small>Includes stealth mode and up to 200K individual vehicle data points</small>																												
Report date	01 May 2025 14:17																												
Start of log	15 Mar 2025 14:08																												
End of log	04 Apr 2025 12:26																												
INCLUDED WITH EVERY SYSTEM																													
MX Subscriptions	3 years out-of-the-box remote connectivity with MX Lite. See all MX subscriptions.																												
MX Cloud	MX Cloud for remote health status monitoring, email/SMS alerts, scheduling, asset management, programming and more																												
MX Field App	Bluetooth® mobile app for on-site setup, local access to default settings, calendar scheduling, system health status and more																												
MX Traffic Analyzer	Software to chart data collected by SPEEDCHECK-MX																												
Support	24/7 access to Carmanah's online Product Support Center																												

Table of Contents

1.0 Introduction	3
1.1 About MX Traffic Analyzer	3
1.2 Accessing MX Traffic Analyzer.....	4
2.0 Vehicle Data	5
2.1 Local Data.....	5
2.2 MX Field App – Local Data	6
3.0 MX Traffic Analyzer	7
3.1 Overview.....	7
3.2 Loading Vehicle Data.....	8
3.3 Filtering Vehicle Data.....	10
3.4 Charting Vehicle Data.....	12
3.5 Generating Report (PDF).....	22
3.6 Downloading Raw Data (CSV)	23

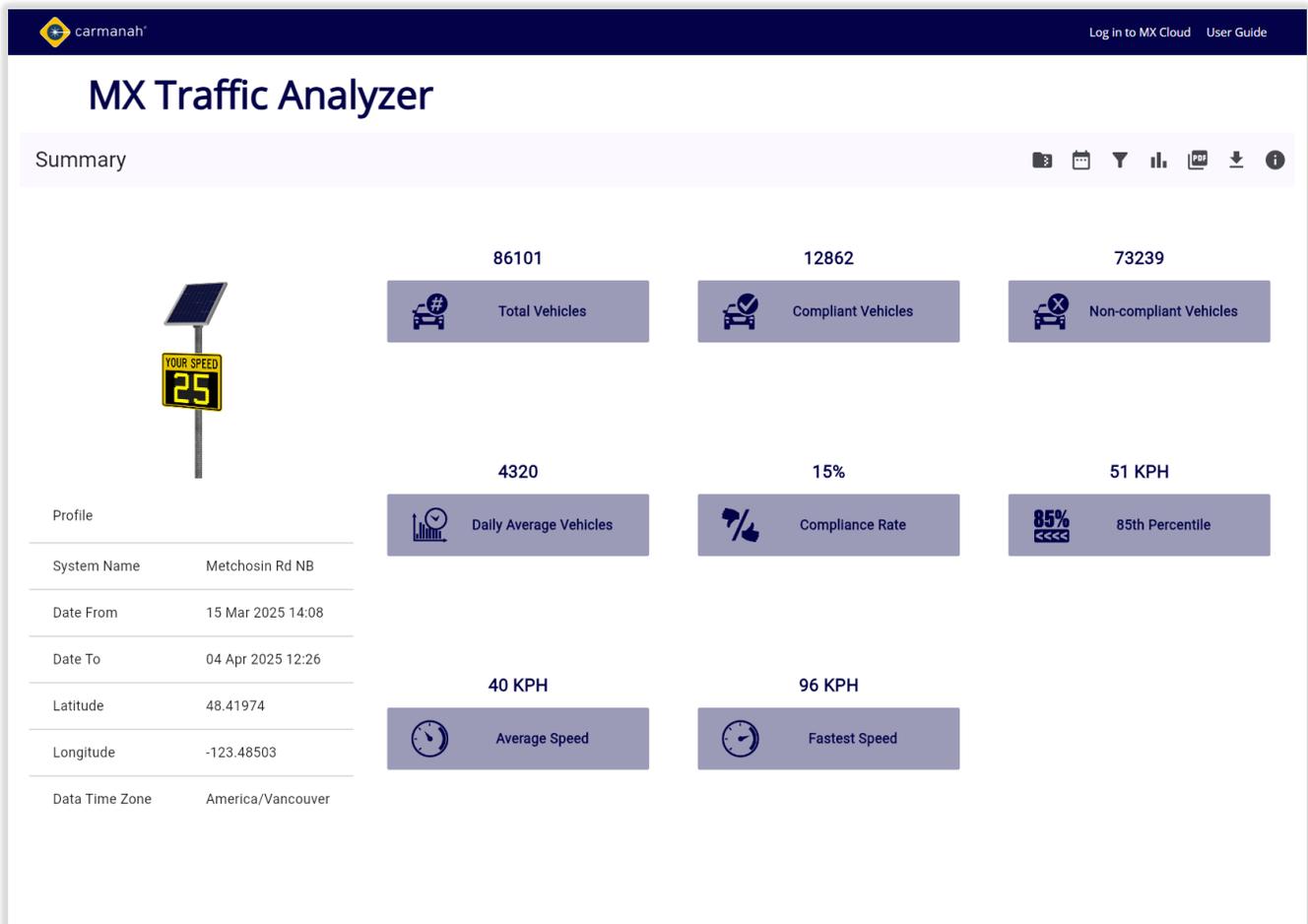
1.0 Introduction

1.1 About MX Traffic Analyzer

SPEEDCHECK-MX radar speed signs automatically log every detected vehicle, recording the date, time, speed, and applicable speed limit at the time of detection. The speed limit value programmed into the system serves as the baseline for calculating compliance statistics. If your system uses scheduled speed limit changes (e.g., school zone timing), the compliance data will reflect the correct speed limit in effect at the time, ensuring accurate reporting.

MX Traffic Analyzer is Carmanah’s web-based tool for reviewing, filtering, and reporting vehicle speed data collected by SPEEDCHECK-MX signs. With this application, users can:

- Load and review downloaded vehicle data
- Analyze vehicle compliance against posted speed limits
- Filter data by specific dates, days of the week, or times of day
- Exclude unusually low or high speeds to refine reports
- Generate charts to visualize traffic patterns and trends
- Export reports as PDFs or raw data as CSV files for further analysis



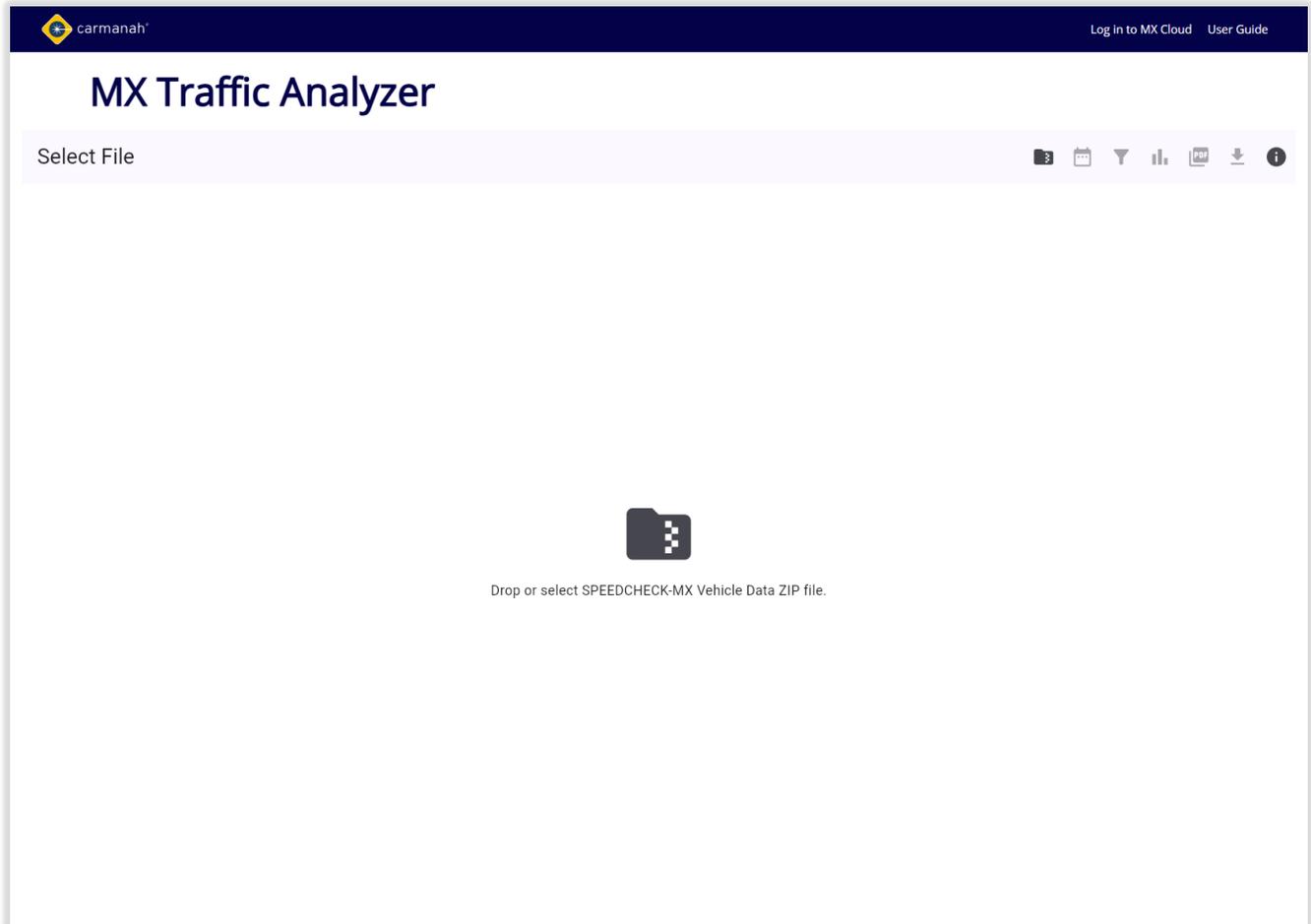
The screenshot displays the MX Traffic Analyzer web interface. At the top, there is a navigation bar with the Carmanah logo on the left and 'Log in to MX Cloud' and 'User Guide' on the right. The main heading is 'MX Traffic Analyzer'. Below this is a 'Summary' section with various data points and a profile table.

Category	Value
Total Vehicles	86101
Compliant Vehicles	12862
Non-compliant Vehicles	73239
Daily Average Vehicles	4320
Compliance Rate	15%
85th Percentile	51 KPH
Average Speed	40 KPH
Fastest Speed	96 KPH

Profile	
System Name	Metchosin Rd NB
Date From	15 Mar 2025 14:08
Date To	04 Apr 2025 12:26
Latitude	48.41974
Longitude	-123.48503
Data Time Zone	America/Vancouver

1.2 Accessing MX Traffic Analyzer

MX Traffic Analyzer can be accessed by navigating to either URL – carmanah.com/traffic-analyzer or mxcloud.live/trafficanalyzer.



NOTE MX Traffic Analyzer is freely available without requiring access to MX Cloud.

NOTE MX Traffic Analyzer utilizes locally downloaded vehicle data. See [Section 2](#) for more information.

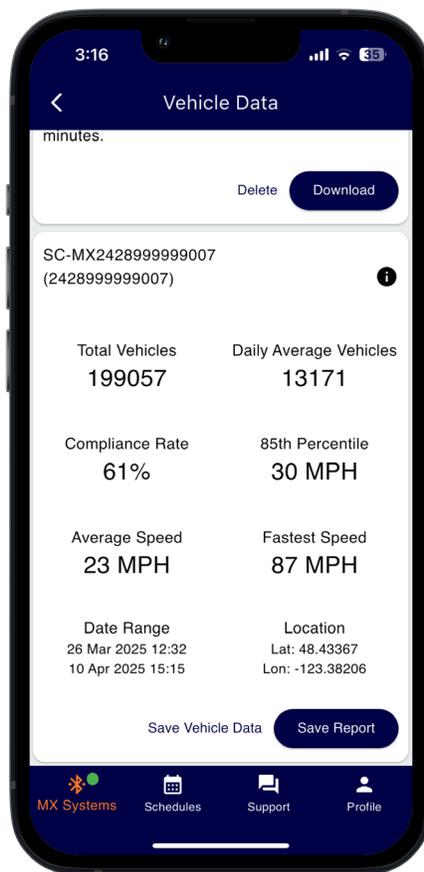
2.0 Vehicle Data

2.1 Local Data

Local vehicle data is downloaded on site using MX Field App. Visit support.carmanah.com for more information on MX Field App.

See below for more information on local data:

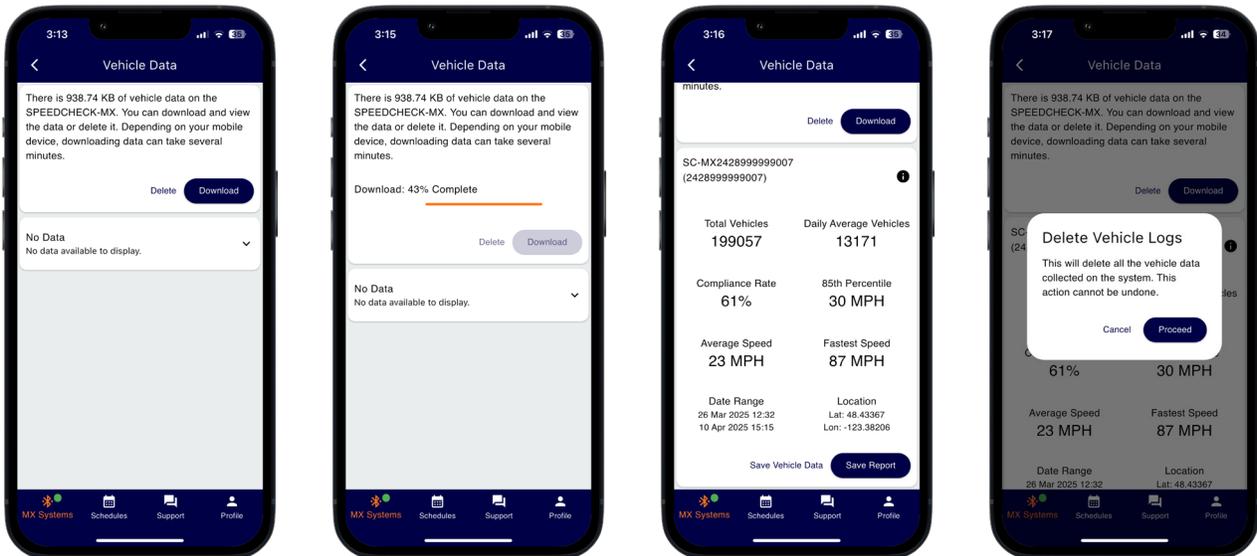
- Local data – each vehicle recorded is individually timestamped



2.2 MX Field App – Local Data

To download vehicle data, follow the steps below when on site with the SPEEDCHECK-MX system:

1. Open MX Field App.
2. Tap on the system you wish to connect to.
3. Tap on Operation and then Vehicle Data.
4. Tap on Download. Wait for the data to download. This may take a few minutes depending on how much data is stored.
5. A breakdown of the data will appear on screen for you to view.
6. Tap on Save Vehicle Data and export to the device you will be using MX Traffic Analyzer with, ideally a tablet, laptop, or desktop.
7. Tap on Delete to clear vehicle log and start collecting new data.



NOTE Vehicle data is exported as a ZIP file.

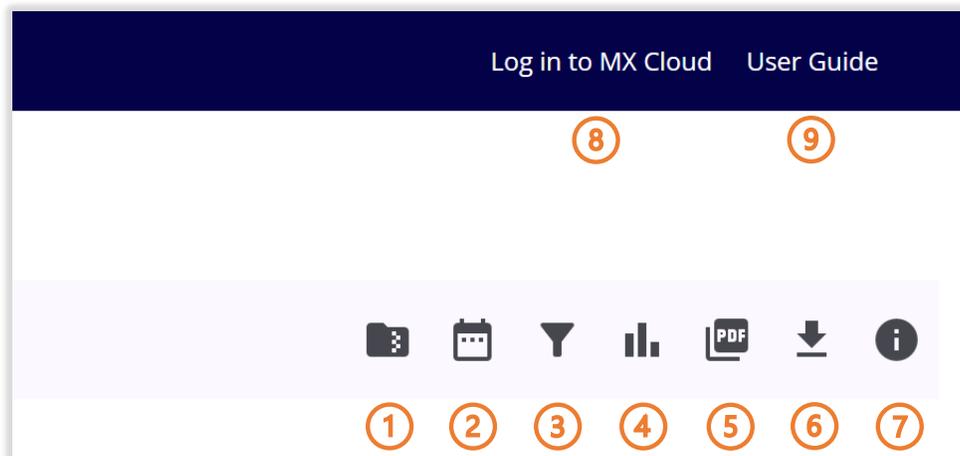
NOTE For a simple vehicle report without needing MX Traffic Analyzer, tap on Save Report to export a PDF of the vehicle data.

3.0 MX Traffic Analyzer

3.1 Overview

You will be greeted with the dashboard below once you access MX Traffic Analyzer. The dashboard is segmented into several functions:

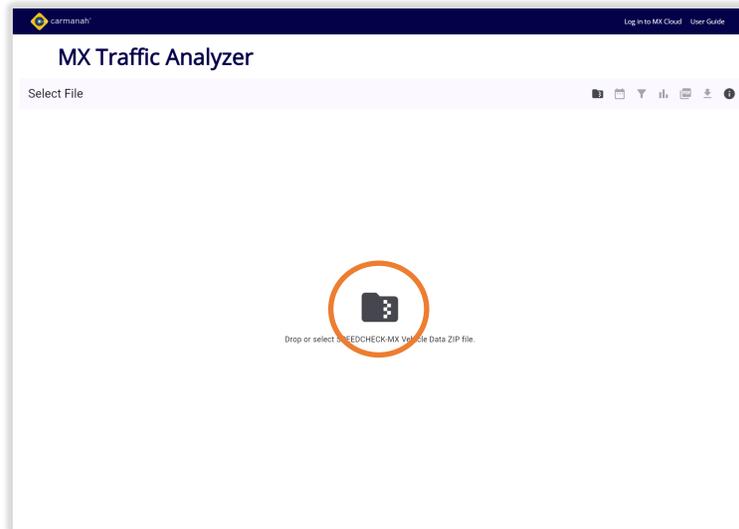
1.  – Loading vehicle data (ZIP)
2.  – Date, day, and time filtering
3.  – Speed filtering
4.  – Chart options
5.  – Generate report (PDF)
6.  – Download raw data (CSV)
7.  – About MX Traffic Analyzer
8. Log in to MX Cloud
9. MX Traffic Analyzer guide

**NOTE**

About MX Traffic Analyzer (#7) provides a short description of the tool and a list of licenses it uses.

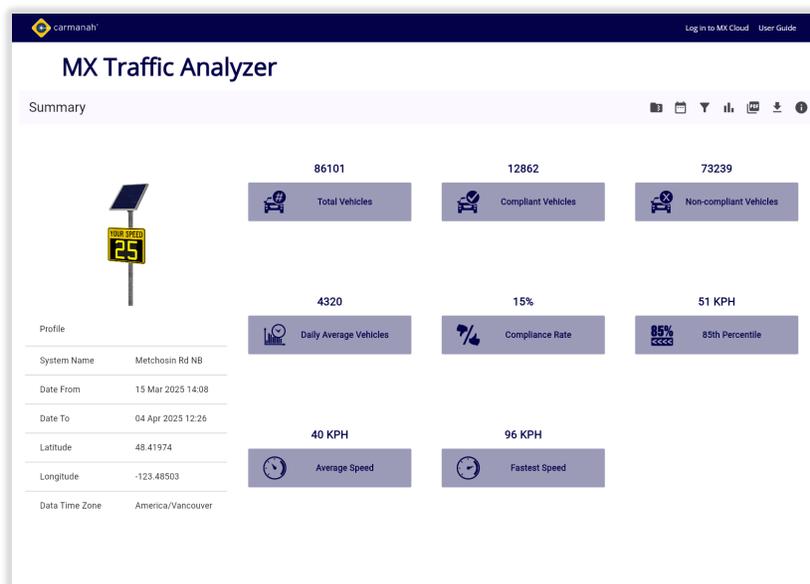
3.2 Loading Vehicle Data

Click on the folder icon and choose the vehicle data file (.zip) downloaded in [Section 2](#). Each system's data will be contained in separate ZIP files.



Once the data has been loaded you will have access to:

- Data compliance
- Data filtering
- Data charting
- Generate report
- Download raw data



NOTE

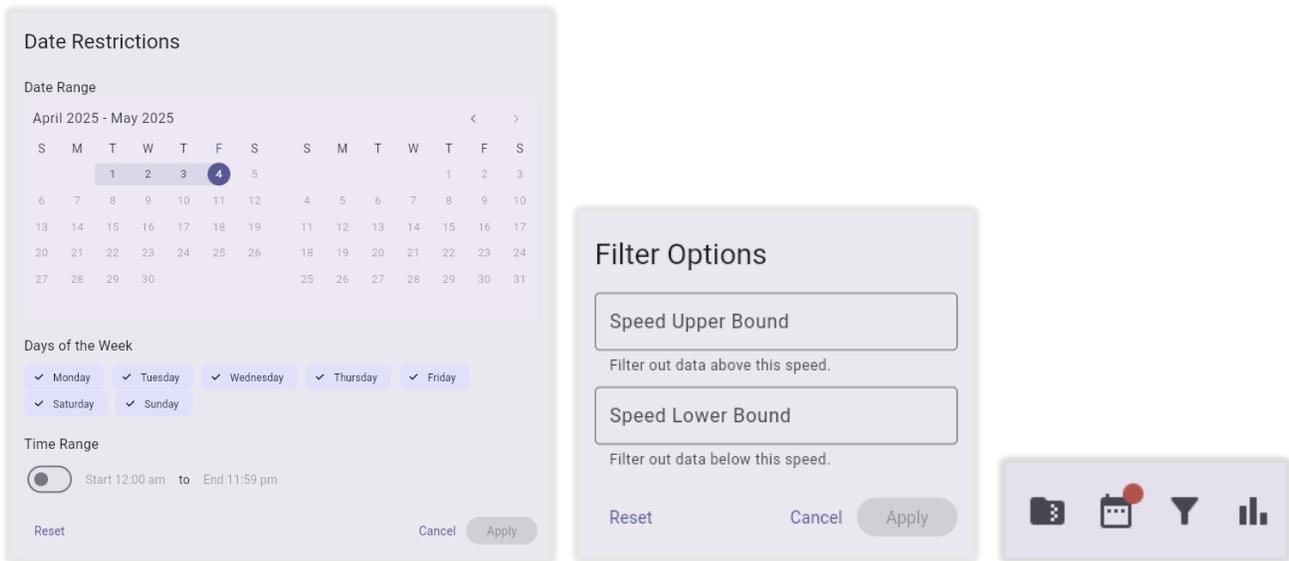
Locally downloaded data (MX Field App) contains individually timestamped vehicles.

Data Point	Description
System Name	Name of radar speed sign as set in MX Field App (or MX Cloud).
Date From	Date and time the data set began.
Date To	Date and time when the data set was downloaded.
Latitude/Longitude	Coordinates of the radar speed sign based on internal system GPS.
Data Time Zone	Date and time of data set as per your local browser settings.
Total Vehicles	Total number of vehicles in the data set.
Compliant Vehicles	Number of vehicles at or below the speed limit value(s) set.
Non-compliant Vehicles	Number of vehicles above the speed limit value(s) set.
Daily Average Vehicles	Average daily vehicles calculated based on total vehicles divided by date range.
Compliance Rate	Compliance rate calculated based on speed limit(s) programmed in MX Field App. This is the percentage of vehicles that were logged at or below the speed limit value(s) set.
85 th Percentile	The speed at or below which 85% of the vehicle speeds logged fall under in the data set.
Average Speed	Average speed in the data set.
Fastest Speed	Fastest speed logged in the data set.

3.3 Filtering Vehicle Data

Vehicle data can be filtered in several ways. You can choose to use any combination from the list below. Each filter will stack on top of each other:

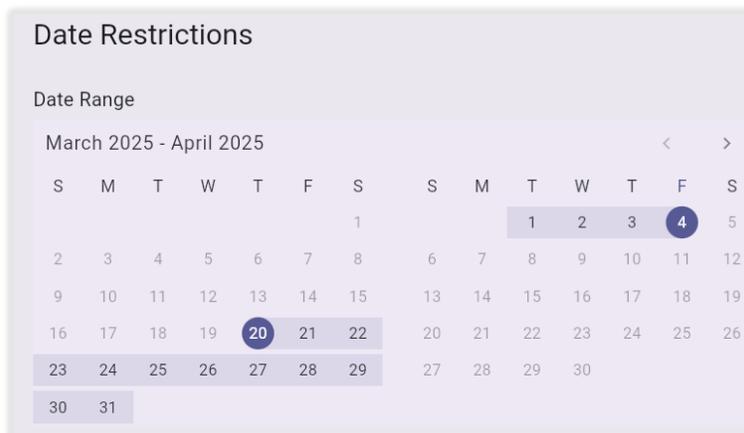
- Date range (calendar)
- Days of the week
- Time range
- Speed values



NOTE Adding filters will affect your data results. You will see a red dot to denote a filter has been applied. To remove any active filters use the Reset button under each function.

Date Range

This filter allows you to choose between two dates in the data set. Anything outside of this range will be filtered out.



Days of the Week

This filter allows you to choose the days of the week within the data set. Any day deselected will be filtered out.



Days of the Week

Monday Tuesday Wednesday Thursday Friday

Saturday Sunday



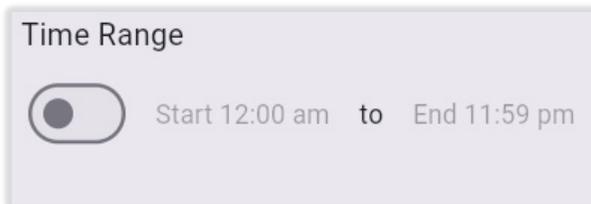
Days of the Week

Monday Tuesday Wednesday Thursday Friday

Saturday Sunday

Time Range

This filter allows you to choose a start time and an end time in the data set. Anything outside of this range will be filtered out.



Time Range

Start 12:00 am to End 11:59 pm

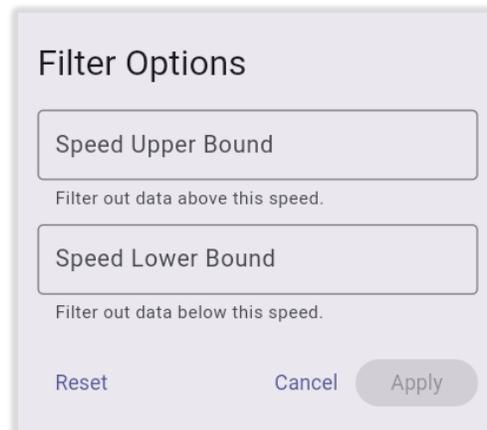


Time Range

Start 7:00 am to End 10:00 pm

Speed Values

This filter allows you to choose the upper and lower speed values in the data set. Anything outside of the boundaries will be filtered out.



Filter Options

Speed Upper Bound

Filter out data above this speed.

Speed Lower Bound

Filter out data below this speed.

Reset Cancel Apply

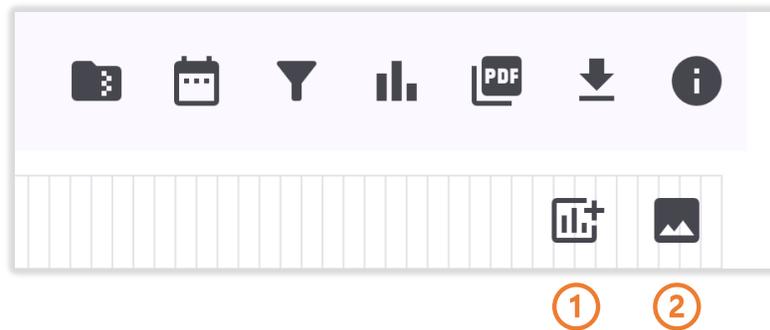
3.4 Charting Vehicle Data

Vehicle data can be displayed in a variety of charting options:

- Summary
- Volume vs Speed
- Daily Average Volume
- Hourly Average Volume
- Speed vs Time
- Hourly Volume Table
- Hourly Volume by Day Table

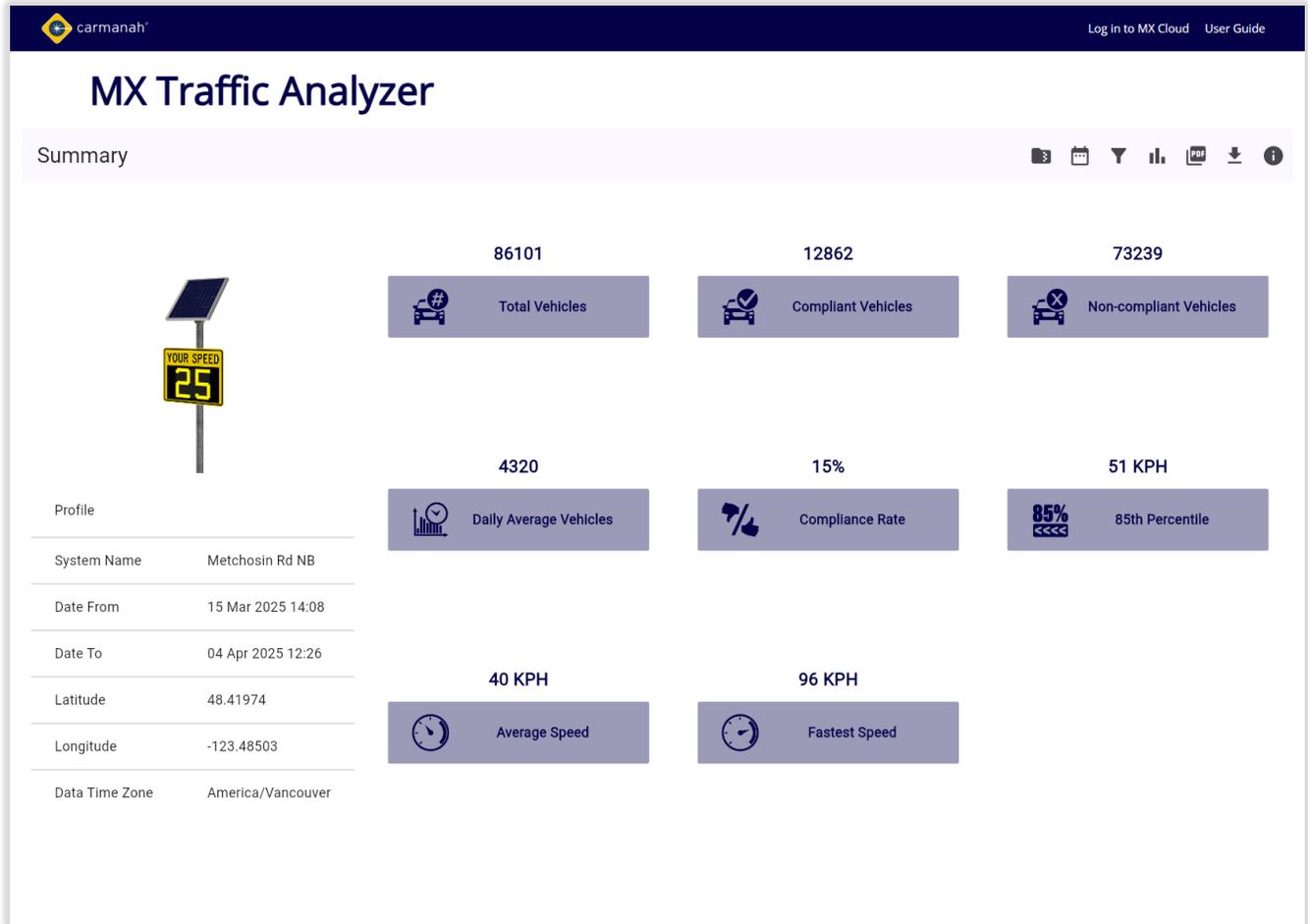
For additional functionality, see below:

1. Click  to add chart to report (see [Section 3.5](#)).
2. Click  to export chart as an image.



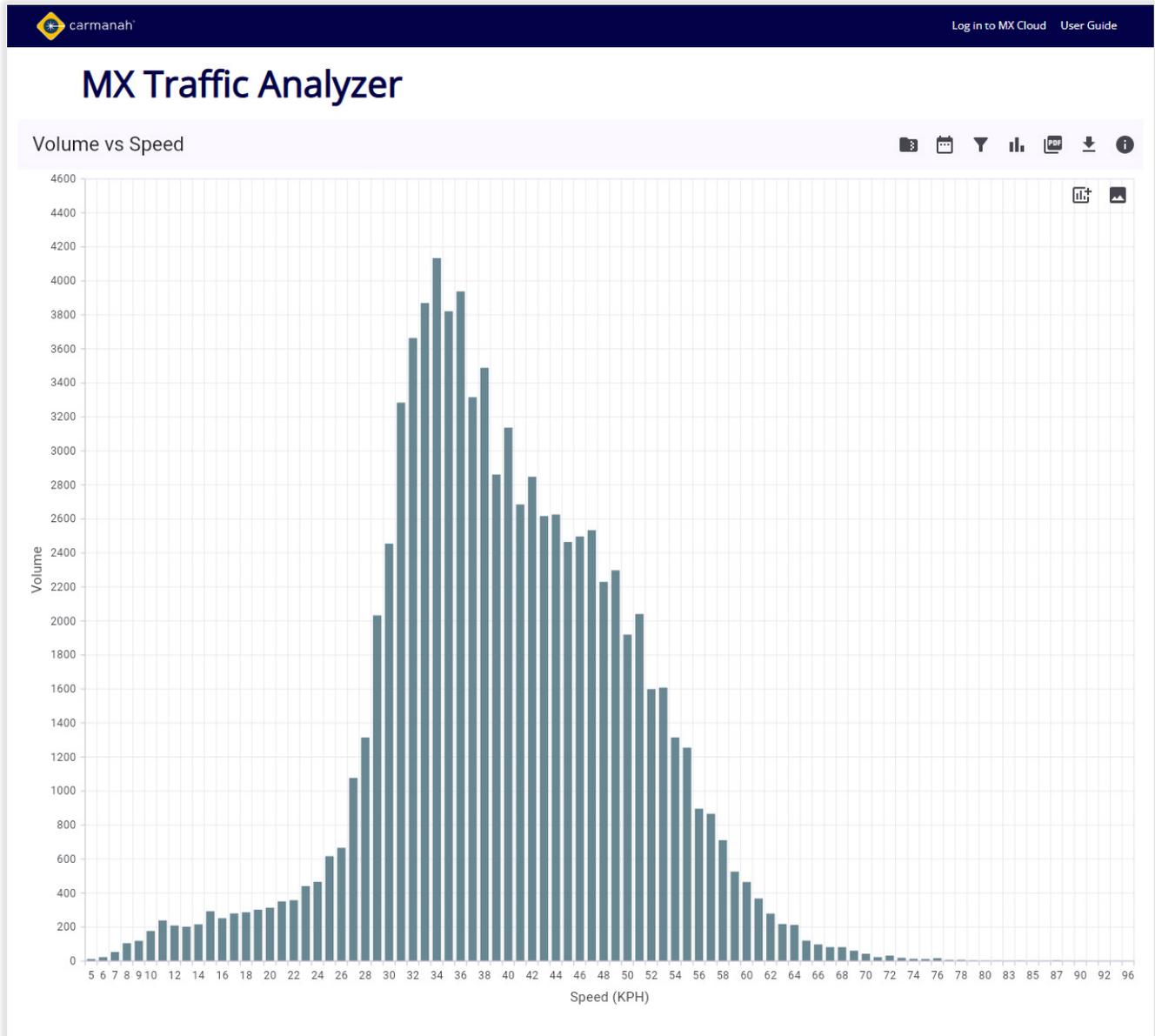
Summary

The summary chart provides detailed compliance data for your system. This is what you'll see after loading the vehicle data into MX Traffic Analyzer.



Volume vs Speed

This chart will display vehicle volume on the Y axis and vehicle speed on the X axis, providing the volume of vehicles for each speed value.

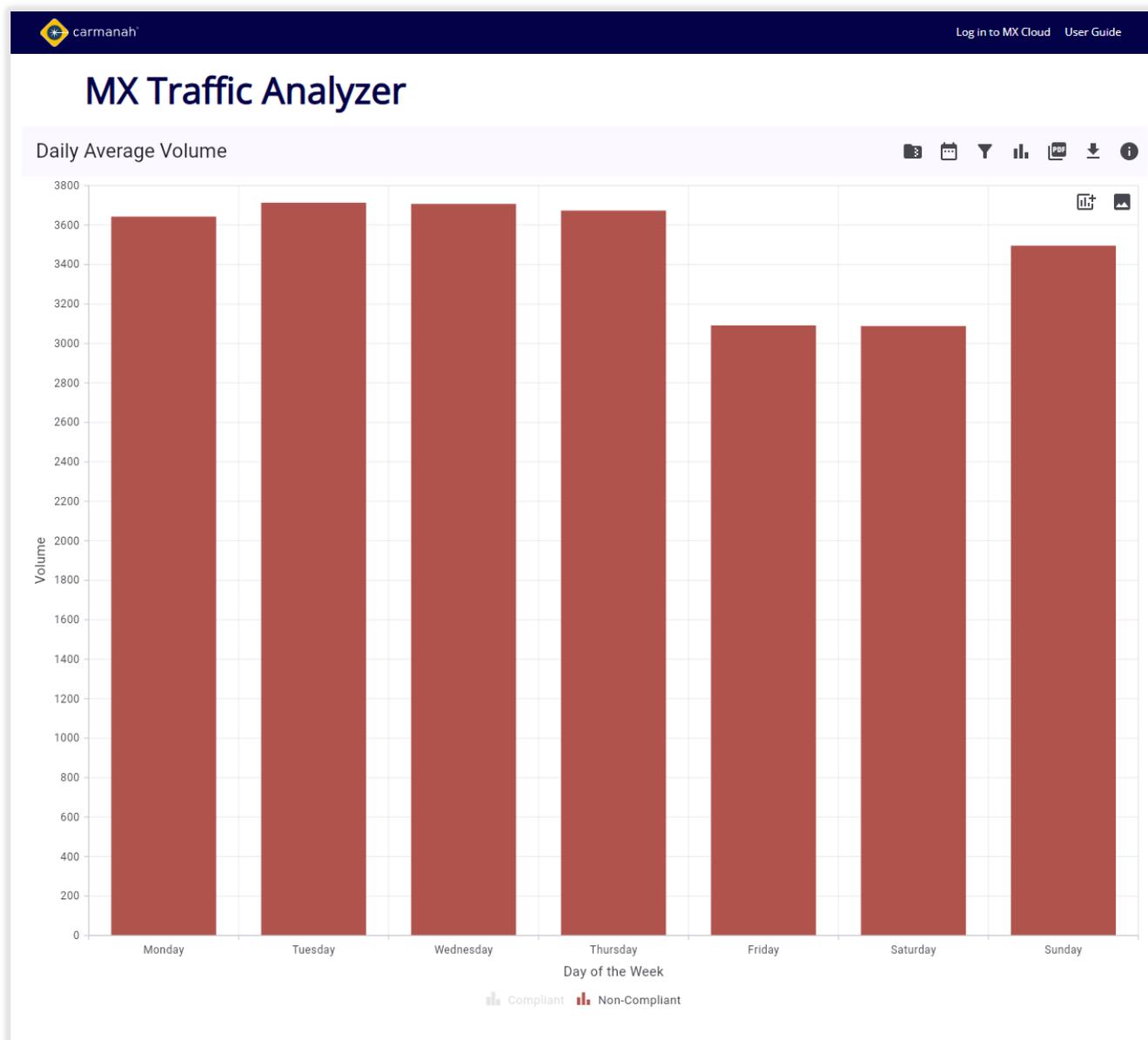


Daily Average Volume

This chart will display vehicle volume on the Y axis and day of the week on the X axis, providing an overview of compliance from Monday through Sunday.

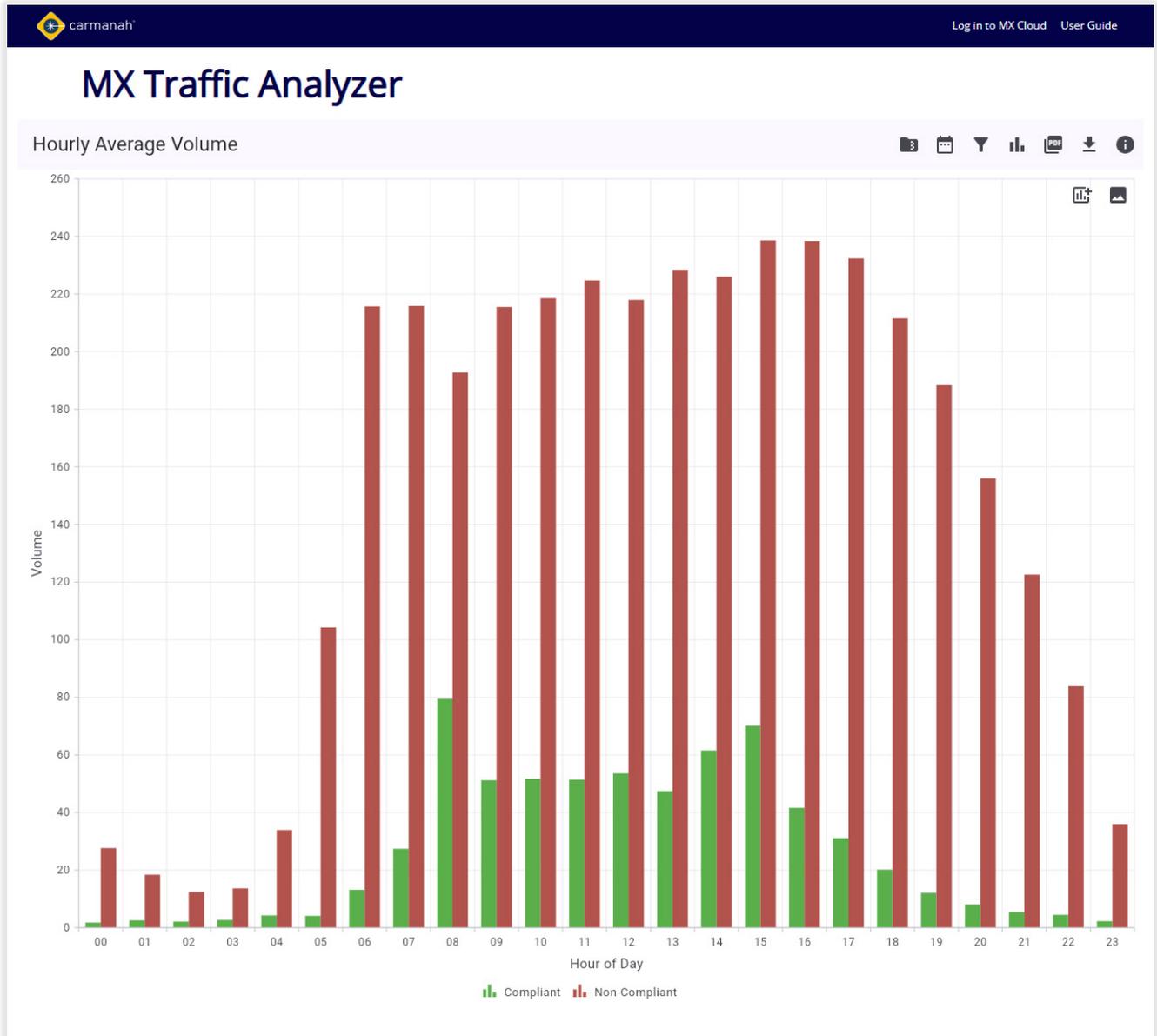


Clicking on Compliant or Non-Compliant will remove the series of data from the chart.

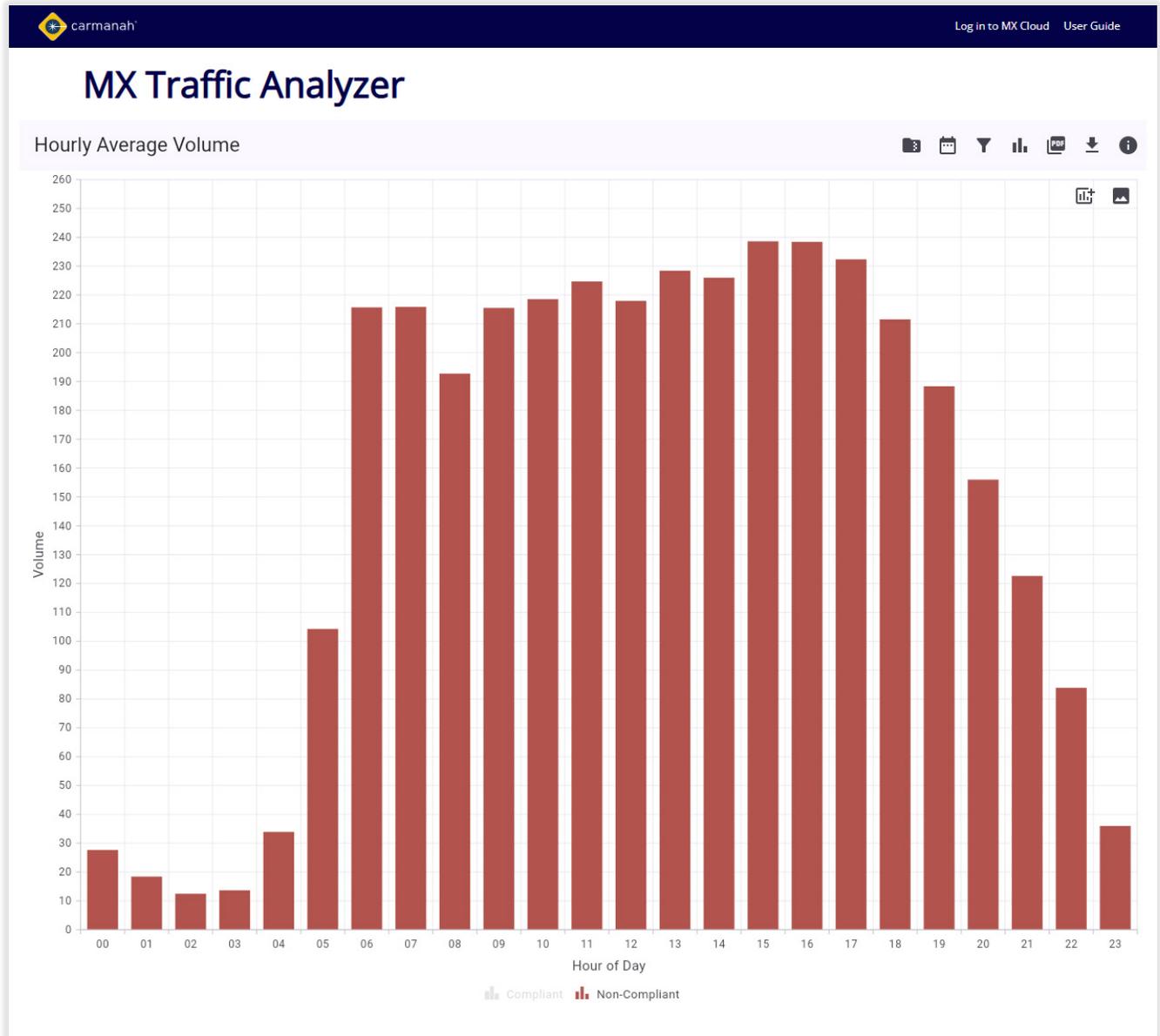


Hourly Average Volume

This chart will display vehicle volume on the Y axis and hour of day on the X axis, providing an overview of compliance for each hour of the day.

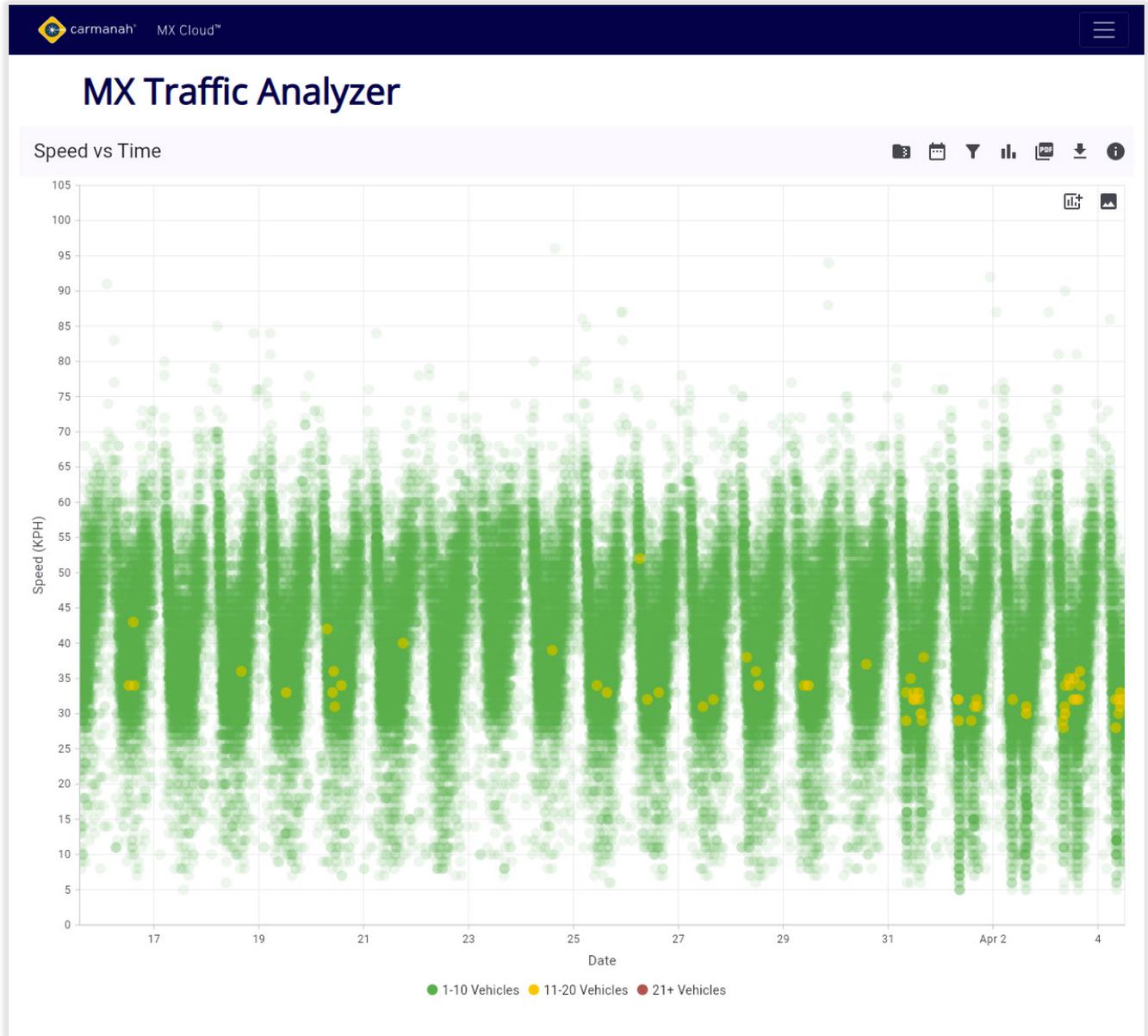


Clicking on Compliant or Non-Compliant will remove the series of data from the chart..



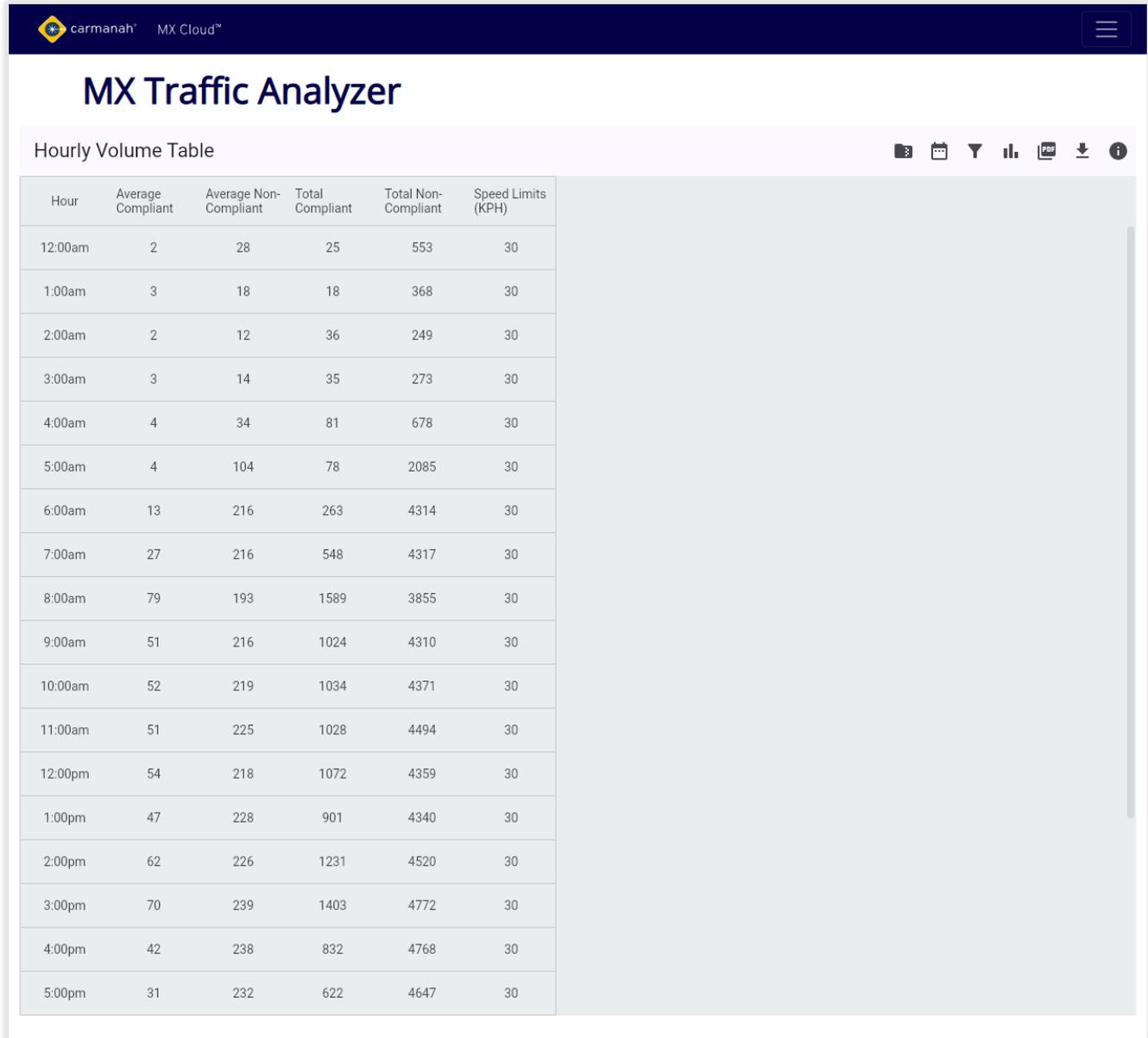
Speed vs Time

This chart will display vehicle speed on the Y axis and date on the X axis, providing an overview of compliance for each date in the data set. This data is a combination of all vehicle speeds.



Hourly Volume Table

This table will list vehicle compliance per hour of the day.



Hour	Average Compliant	Average Non-Compliant	Total Compliant	Total Non-Compliant	Speed Limits (KPH)
12:00am	2	28	25	553	30
1:00am	3	18	18	368	30
2:00am	2	12	36	249	30
3:00am	3	14	35	273	30
4:00am	4	34	81	678	30
5:00am	4	104	78	2085	30
6:00am	13	216	263	4314	30
7:00am	27	216	548	4317	30
8:00am	79	193	1589	3855	30
9:00am	51	216	1024	4310	30
10:00am	52	219	1034	4371	30
11:00am	51	225	1028	4494	30
12:00pm	54	218	1072	4359	30
1:00pm	47	228	901	4340	30
2:00pm	62	226	1231	4520	30
3:00pm	70	239	1403	4772	30
4:00pm	42	238	832	4768	30
5:00pm	31	232	622	4647	30

Hourly Volume by Day Table

This table will list hourly vehicle volume for each day of the week.



The screenshot shows the MX Traffic Analyzer interface with a dark blue header containing the Carmanah MX Cloud logo and a menu icon. The main content area is titled 'MX Traffic Analyzer' and features a sub-header 'Hourly Volume by Day Table'. To the right of the sub-header are several icons for filtering and data export. The table below displays hourly vehicle volume data for each day of the week, along with Weekday and Weekend averages.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Weekday Average	Weekend Average
12:00am	61	64	65	55	92	86	155	22	48
1:00am	21	35	60	53	36	61	120	14	36
2:00am	41	32	28	31	38	50	65	11	23
3:00am	36	41	41	52	50	38	50	15	18
4:00am	104	124	148	122	143	55	63	43	24
5:00am	359	385	409	358	388	110	154	127	53
6:00am	813	857	828	813	752	235	279	271	103
7:00am	847	843	884	840	784	329	338	280	133
8:00am	861	907	858	915	920	439	544	297	197
9:00am	817	860	803	775	828	512	739	272	250
10:00am	790	756	816	816	812	602	813	266	283
11:00am	817	822	823	860	813	594	793	276	277
12:00pm	791	846	774	818	691	652	859	261	302
1:00pm	794	790	809	801	568	632	847	269	296
2:00pm	827	852	835	840	603	877	917	283	299
3:00pm	921	956	1019	911	638	858	872	318	288
4:00pm	803	908	857	839	577	834	782	285	269
5:00pm	744	788	791	801	563	825	757	263	264

3.5 Generating Report (PDF)

Vehicle data can be exported into a PDF report. To generate a report, follow the steps below:

1. Load vehicle data as per [Section 2](#).
2. Apply any filters, as per [Section 3.3](#), if required.
3. Go to each chart you wish to add to the report.
 - a. The summary page will automatically be added by default. Tables are not able to be added to the report.
4. Click on the Add to Report button ()
5. Click on the Generate Report button ()
6. Click on Download.
7. View and distribute the PDF as needed.

 carmanah® MX Series
carmanah.com
MX TRAFFIC ANALYZER REPORT
Connected Radar Speed Signs



PROFILE	
System	Metchosin Rd NB
Serial #	
Location	48.41974, -123.48503
Carmanah Model	SPEEDCHECK-MX <small>Includes stealth mode and up to 200K individual vehicle data points</small>
Report date	01 May 2025 14:17
Start of log	15 Mar 2025 14:08
End of log	04 Apr 2025 12:26

INCLUDED WITH EVERY SYSTEM	
MX Subscriptions	3 years out-of-the-box remote connectivity with MX Lite. <small>See all MX subscriptions.</small>
MX Cloud	MX Cloud for remote health status monitoring, email/SMS alerts, scheduling, asset management, programming and more
MX Field App	Bluetooth® mobile app for on-site setup, local access to default settings, calendar scheduling, system health status and more
MX Traffic Analyzer	Software to chart data collected by SPEEDCHECK-MX
Support	24/7 access to Carmanah's online Product Support Center

Specifications subject to local environmental conditions, and may be subject to change.
 All Carmanah products are manufactured in facilities that are certified to ISO quality standards.
 Carmanah and Carmanah logo are trademarks of Carmanah Technologies Corp.
 © 2025, Carmanah Technologies Corp. Document: Carmanah_MX_Traffic_Analyzer_Report_Rev4

86101



Total Vehicles

4320



Daily Average Vehicles

12862



Compliant Vehicles

73239



Non-compliant Vehicles

15%



Compliance Rate
Using speed limit(s) set on system

51 KPH

85%



85th Percentile

40 KPH



Average Speed

96 KPH



Fastest Speed

NOTE

If a filter has been applied to the data the report will be noted on each chart.

3.6 Downloading Raw Data (CSV)

Vehicle data can be exported into a .csv file. To generate the file, follow the steps below:

1. Load vehicle data as per [Section 2](#).
2. Apply any filters, as per [Section 3.3](#), if required.
3. Click on Download CSV button (↓).
4. View and distribute the CSV as needed.

A	B	C	D
timestamp	speed	speed_limit	units
3/15/2025 14:08	42	30	kph
3/15/2025 14:09	52	30	kph
3/15/2025 14:09	43	30	kph
3/15/2025 14:09	41	30	kph
3/15/2025 14:09	29	30	kph
3/15/2025 14:10	42	30	kph
3/15/2025 14:10	42	30	kph
3/15/2025 14:11	48	30	kph
3/15/2025 14:11	22	30	kph
3/15/2025 14:11	50	30	kph
3/15/2025 14:11	49	30	kph
3/15/2025 14:12	46	30	kph
3/15/2025 14:12	40	30	kph
3/15/2025 14:12	34	30	kph
3/15/2025 14:12	31	30	kph
3/15/2025 14:12	30	30	kph
3/15/2025 14:12	29	30	kph
3/15/2025 14:13	24	30	kph
3/15/2025 14:13	40	30	kph
3/15/2025 14:13	49	30	kph
3/15/2025 14:14	46	30	kph
3/15/2025 14:14	47	30	kph
3/15/2025 14:14	41	30	kph
3/15/2025 14:14	56	30	kph
3/15/2025 14:14	48	30	kph
3/15/2025 14:14	43	30	kph
3/15/2025 14:14	55	30	kph
3/15/2025 14:14	45	30	kph
3/15/2025 14:15	35	30	kph
3/15/2025 14:15	37	30	kph
3/15/2025 14:15	38	30	kph
3/15/2025 14:15	34	30	kph
3/15/2025 14:15	45	30	kph
3/15/2025 14:15	37	30	kph
3/15/2025 14:16	46	30	kph
3/15/2025 14:17	43	30	kph
3/15/2025 14:17	36	30	kph
3/15/2025 14:17	32	30	kph
3/15/2025 14:17	44	30	kph
3/15/2025 14:17	42	30	kph
3/15/2025 14:17	43	30	kph
3/15/2025 14:17	13	30	kph
3/15/2025 14:18	31	30	kph

NOTE

Raw data export can be filtered or unfiltered data. To download the original raw vehicle data, clear all filters before exporting (see [Section 3.3](#)).



© 2025 Carmanah Technologies Corporation

Technical Support:

Email: customersupport@carmanah.com

Toll Free: 1.877.722.8877 (US & Canada)

Worldwide: 1.250.380.0052

Fax: 1.250.380.0062

Web: carmanah.com