

Getting Started with TraffiCloud Sign Manager



Copyright © 2024 All Traffic Solutions, Inc.®. All rights reserved.

This manual may not be copied in whole or in part, nor transferred to any other media or language, without the express written consent of All Traffic Solutions.

This document is supplied as a guide for the All Traffic Solutions ATS devices. Reasonable care has been taken in preparing the information it contains. However, it is possible that this document contains omissions, technical inaccuracies, or typographical errors. Product specifications are subject to change without notice and should not be considered commitments by All Traffic Solutions. All Traffic Solutions does not accept responsibility of any kind for customers' losses due to the use of this document.

Trademarks

All Traffic Solutions, Inc.®, ATS®, All Traffic Solutions devices, and TraffiCloud® are registered trademarks of All Traffic Solutions. TraffiCloud Sign Manager™ is a trademark of All Traffic Solutions. All other product and company names are trademarks or registered trademarks of their respective owners.

This document may contain confidential and proprietary information of third parties which is protected by copyright, trade secrets and trademark law and may not be provided or otherwise made available without prior written authorization.

Document created: 12:39 PM on Monday, July 1, 2024

ver. 1.0, Part number: 4800186

All Traffic Solutions, Inc.® 14201 Sullyfield Circle, Suite 300 Chantilly, VA United States 20151

Tel: 1-866-366-6602 Fax: 1-814-237-9006 Web: <u>www.alltrafficsolutions.com</u> Sales email: <u>sales@alltrafficsolutions.com</u> Technical Support email: <u>support@alltrafficsolutions.com</u>

Viewing this document



NOTE: If you are reading this document online and have a medium- to large-screen monitor, it's best viewed with the window maximized, in Adobe® Reader, Adobe Acrobat Pro, or equivalent using the preset two-page view **D**, rather than directly in a Web browser.

Table of Contents

bout this document	v
System requirements	V
Documentation conventions	v
verview	7
Exploring the TraffiCloud Sign Manager user interface	8
The Top menus	8
The Navigation tabs	9
stalling TraffiCloud Sign Manager	11
Signing in to TraffiCloud Sign Manager for the first time	11
onnecting to your equipment	13
USB Connections	13
Bluetooth	14
Using the Home tab	15
Viewing Live Speeds	15
Details: Live Monitor view	16
Using the Sign Settings tab	16
sing the Messaging libraries	21
Working with messages	22
About the Dependent Message Library	24
Working with Dependent Message Groups	25
anaging pictures	27
/orking with logs and traffic data	29
ontacting Customer Support	31

ALL TRAFFIC SOLUTIONS TM

About this document

This Getting Started Guide is meant for anyone who needs to set up one or more All Traffic Solutions devices using TraffiCloud Sign Manager. The guide provides an introduction to TraffiCloud Sign Manager and describes the basic use and configuration of the system.

For details about physical setup, refer to the Quick Start Guide provided with your device and available for download from the <u>ATS Technical Customer Support page</u>.

System requirements

TraffiCloud Sign Manager is compatible with Windows versions 7 to Windows 11, excluding Windows RT and Windows XT.

The TraffiCloud portal has been tested with all the leading Web browsers, and works best with Google Chrome. You can sign on at <u>portal.trafficloud.com</u>.

Documentation conventions

This document uses the following formatting conventions:

Format	Description
Bold	Used in procedures to indicate menu commands, interface controls and dialog box options.
Italicized monospace text	Used to indicate text that you should replace with your own. For example: In the Save As text box, enter c:\filename.ext where filename.ext is the name of the file you want to save.
Right chevron >	Used to indicate a sequence of commands (and sub commands) to be carried out in the displayed order. For example, " Equipment tab > Nickname refers to the Nickname section of the Equipment page".

Note: Notes are used as reminders or to provide information of interest that supplements or emphasizes important points of the main text.

TIP: Tips are used to suggest alternative methods, workarounds and/or shortcuts that are not essential but that you may find useful in a given situation.

CAUTION: Cautions advise users of specific actions that could result in a loss of data.

ALL TRAFFIC SOLUTIONS

Overview

TraffiCloud Sign Manager is an included PC application for configuring your devices. You connect to your sign locally, either using a USB cable or over optional Bluetooth.

While TraffiCloud Sign Manager is a standalone program, it does link to the TraffiCloud portal when an Internet connection is available. The TraffiCloud link (<u>portal.trafficloud.com</u>) enables you to upload, store, and assign your traffic data to a collection site for reporting purposes. The TraffiCloud portal also provides a library for variable message signs, where anyone in your organization can store and share device messages for use on other PCs and equipment.



[Figure 1] ATS 5 Trailer and SpeedAlert radar-enabled messaging sign

When you're connected in TraffiCloud Sign Manager to your sign via USB or Bluetooth, you can do the following:

- » Monitor and manage your sign
- » Authenticate users
- » Configure and manage settings on your sign
- » Create and activate messages for your sign
- » Set up alerts from devices
- » Download logs and traffic data for upload and analysis on the TraffiCloud portal

With Shield radar signs, **Speed Display** is the most popular sign mode, providing immediate feedback about vehicle speed, with optional blinking and strobe warnings, for signs so equipped, at specified speeds.

For the multipurpose SpeedAlert, **Dependent Messages** is the go-to sign mode, displaying messages specific to vehicle speed ("Slow Down", "Too Fast!", "Have a Nice Day"), or dedicated messages ("Flood Warning", "Amber Alert"), depending on your needs.

InstAlerts display custom messages in **Single Message** mode wherever they're needed, to direct traffic for events or emergencies, or for public service messaging.

Exploring the TraffiCloud Sign Manager user interface

The uppermost section of the TraffiCloud Sign Manager home page includes four **Top menus**, and displays your **Current Profile**, **Cloud Status**, and the **Detected Devices** box and **Connect** button, which you use to select and connect to your device.



The Top menus

The TraffiCloud Sign Manager **Top menus** include a wide range of access points and commands to help you manage your device. Here's a summary of the functionality you'll find there:

Menu	Commands	What you can do
TraffiClo	bu	
	Cloud Login	Enter your login credentials to sign on. TraffiCloud Sign Manager will remember them and automatically log you on during future sessions.
	Add Profile	Login with your account. If you have guest access to other accounts, you can add those profiles here. Profiles are additional accounts.
	Manage Profiles	Displays all devices on a given account profile, including serial number, nickname, and device hash, which provides information about the device and user for security purposes.
	Change Storage Folder	Change the local or network folder where All Traffic Solutions devices stores your data. Depending on your product, Sign Manager stores traffic data, message files, images, and so forth.

Menu	Commands	What you can do
	Exit	Exits the program.
Connecti	on	
	USB	Select your connection methods from any of these three options: USB ,
	Bluetooth	Bluetooth, or Serial cable.
	Serial	
	Refresh	Click to see devices that have been connected or paired since the last refresh.
Tools		
	Check for Sign Update	Check to see if there are any firmware updates available for the sign.
	Sync Time (PC to Sign)	Synchronize the time on the sign with the time on the PC. It's a good idea to check the time and do this before deploying the sign each time.
	Locate Sign	When you connect over Bluetooth, if there are multiple signs nearby, this command displays the connected sign's boot-up sequence to identify it.
	Initiate Move Sign	Connect to the server to download any new settings.
	Reboot Sign	Reinitialize the sign.
	Start Sign Cloud Connect	Connect the sign to TraffiCloud immediately, rater than waiting until the next scheduled checkin.
Help		View the product version, open the <i>Getting Started with TraffiCloud Sign Manager</i> guide, download USB drivers, access other product manuals and videos, visit the TraffiCloud or ATS web sites, view the software license agreement, check for updates, simulate a device connection, or access advanced support tools.

The Navigation tabs

The TraffiCloud Sign Manager **Navigation tabs** appear across the top of the page. The tabs displayed vary depending on the equipment you have and your connection state. The following sections provide an overview of the tabs and what you can do with them.

Current Profile:						
Cloud Status:	Cloud Co	nnected				Navigation tabs
Detected Devices	Simulate	ed Virtual Device	•	- Disco	onnect	Navigation tabs
Connection and Setup	Home	Sign Settings	Message Library	Dependent Message Library	Picture Management	Logs and Traffic Data



Installing TraffiCloud Sign Manager

Download the latest version of the software here and run the installation program:

http://c.alltrafficsolutions.com/signmanager

If you plan to use USB to connect to your equipment, you may need the USB drivers, which are posted here:

http://c.alltrafficsolutions.com/usb

If you plan to use Bluetooth to connect to your equipment, you must pair your PC and sign using your PC's Bluetooth settings tools first. The PIN code for paring is "ATS" (upper case).

TraffiCloud Sign Manager is compatible with Windows versions 7 to Windows 11, excluding Windows RT and Windows XT.

Signing in to TraffiCloud Sign Manager for the first time

If this is your first time using TraffiCloud Sign Manager, you'll be prompted to login. Use your TraffiCloud login credentials. Check with your administrator or supervisor for your user name (usually your work email address) and password.



Note: TraffiCloud administrators can also add and manage users in TraffiCloud.

To sign in to TraffiCloud Sign Manager for the first time:

1. The first time you open TraffiCloud Sign Manager you'll see the following prompt:



[Figure 2] The Welcome window

- 2. Click the **Login** button. The **Add Account Profile** window opens. If you click **Guest**, you'll have read-only access to all signs.
- 3. Enter your assigned email address and password:

Add Account Prof	le
Email	<your email@yourcompany.com=""></your>
Password	
Forgot your passw	od? Log In Cancel

[Figure 3] Add Account Profile window

You can reset your password as needed using **Change Password** on the **TraffiCloud** website.

Connecting to your equipment

TraffiCloud Sign Manager enables you to make connections to equipment over USB or optional Bluetooth.

USB Connections

All Traffic Solutions devices typically use a USB mini-connector for direct connection to TraffiCloud Sign Manager. On Shield signs and SpeedAlert 18 and InstAlert 18 signs, the port is located above the power switch under a small rectangular rubber plug.



[Figure 4] USB port on Shields, SA 18s, and IA 18s

CAUTION: RISK OF DAMAGE TO EQUIPMENT: To avoid risk of damage to signs from precipitation, be sure to reinstall the rubber plug into the USB port after you finish each connection.

On SpeedAlert and InstAlert 24s, the port is inside an access panel on the back of the sign, as shown:



[Figure 5] USB port location on SA 24s and IA 24s

Customers with any of our larger trailers can connect a PC to the sign using the USB cable included in the battery box.

To connect over mini-USB:

- 1. Connect the USB-to-mini-USB cable between to your sign and your laptop.
- Run the TraffiCloud Sign Manager software. The Detected Devices selection box should display All Traffic Solutions Device. If not, click the Refresh button to detect your sign (it won't display if you launched TraffiCloud Sign Manager before you connected the USB cable). If refreshing doesn't work, you may need to install the Sign Manager USB drivers on your PC. See Installing TraffiCloud Sign Manager on page 11.
- 3. Click the **Connect** button to read and display the settings from your equipment.

Bluetooth

Before you attempt a Bluetooth connection, you'll need to pair your equipment with your PC. Make sure that the option was purchased for your equipment and that your PC supports Bluetooth. Only one device can be connected over Bluetooth at a time.

To make a Bluetooth connection:

- 1. Use your PC's Bluetooth software in Windows Control Panel to find the device and pair it. The pairing code is **ATS** (use uppercase).
- Once your device is paired, run TraffiCloud Sign Manager and on the Connection and Setup tab, under Connection enable Bluetooth. This populates the Detected Devices list with the names of your paired equipment.
- 3. Select the name of the desired device and click the **Connect** button. Upon successful connection all of your device's settings display in TraffiCloud Sign Manager.

Using the Home tab

Once you connect to your device, the focus shifts to the **Home** page, where you can view your **Access Level**, and basic equipment details, such as **Sign Name**, **Product Type**, **Firmware Version**, **Sign Mode**, **Power** remaining, **Cell Strength**, **Serial Number** and **Modem ID**, the **Active Message**, **Average Speed**, and **85% Speed**. You can also use the **Live Speeds** button to show a popup of current speeds as vehicles pass the device, click the **Details** button to view a wide range of information about the device if needed for troubleshooting purposes, and **Disconnect** from your device.



[Figure 6] The Home page

Viewing Live Speeds

Click the **View Live Speeds** button to display speed of oncoming vehicles. Here's an example of what you'll see:



Details: Live Monitor view

The *Details* button brings up a live monitor view of many internal values for your equipment, which are helpful in troubleshooting any problems.

General		Cellular		Alerts and Errors	Travel Times			
Serial Number:	VirtualDevice	Modem Type:	GSM_H5 Registered	Alert Tamper 🗌 0	Update Perio	d: - sec		
Nickname:	atsVirtualSign	Modem ID:	89011704233816566928	Alert Image 53	Refresh Fla	g: false		
Firmware Versions:	4570200 3.3.1	APN:	alltrafficsolutions01.com.att	Alert Congestion 14	Best Route	s: Time	: Rou	te x
	4570201 3.3.0	Signal Strength:	3 bars BER: 0	Alert High Speed 🗍 53		Delay	: Rout	te x
Date:	Monday, January 01, 0001	Connect Flag:	True	Alert Low Battery 🗌 15		Speed	: Rout	te x
Time:	12:00:00 AM	Modem State:	Off	Alert Very Low Battery 5	Route 1:	Inactive		
Sign Type:	SpeedAlert VMS 24"	Server Process:	IDLE	Error Radar	ID:		Time:	
Damas		Daily Call-in Time::	12:00 AM	Error Bluetooth	Speed:	-	Delay:	
Fower		Server::	Production	Error Modem	Route 2:	Inactive		
Supply Type:	AC	Veriables and Octor	4	Error Camera	ID: Speed:	-	Time:	
Supply Voltage:	12./3V (8/%)	Vanables and Outpi	uts		Speed.	-	Delay:	
Solar Papel:	Not lostalled	Analog value:	0	Options and Apps	Route 3:	Inactive	T	
Joiai Farici.	Not installed	Digital inputs:	00	Traffic Data Logging 🔽	Speed:	_	Delay:	
Sensors		Timer Value:	00:00:00	Bluetooth MT 🔽 Strobe 🔽	Route A:	Inactive		
Light Level:	Five	String X:		Relay Output 🗹 🛛 Pictures 🔽	ID:		Time:	
Temperature:	74°F	String U:		Hom 🗹 🛛 Tamper 🔽	Speed:	- 1	Delay:	
Accelerometer:	X: 0 Y: 0 Z: 0	String Z:			Route 5:	Inactive		
Radar:	DR1500 ON passed config	Strobe:	OFF (D)	Remote Sign Management 🔽	ID:	-	Time:	
Radar Speed:	24 mph Avg: 23 mph	Relay1 Closure:	OFF (Beacons)	Remote Traffic Data Collection 🔽	Speed:	-	Delay:	
lum of GPS Satellites:	0	heldy2 closure.	(nom)	Remote Picture Collection				
New GPS Ex:	No	Pictures		Alerts 🔽	Status:	Packet		
CRC Level	Map ()	Camera State:	Idle	Premier Care				
GPS Location:	<u>Map 1. 1</u>	Camera Status:	Success	Travel Times				
Dist from prev GPS:	U	num of Images:	14	Remote Live Text				

[Figure 7] Live Monitor page

Using the Sign Settings tab

You use the Sign Settings tab to configure device settings, most importantly, **Sign Mode**. The available sign modes are determined by the type of product connected. Here's a summary of the sign modes:

Sign Mode	What it does	Available on
Display Off	Keeps the display blank. Continues to collect traffic data if the device is equipped with radar.	All models
Changeable Speed Limit	Displays the speed limit value.	All models
Speed Display	Displays the speed of approaching vehicles.	Models with radar
Single Message	Continually loops a single variable message.	Models with full matrix displays
All Messages	Continually loops through all loaded messages.	Models with full matrix displays

Sign Mode	What it does	Available on
Dependent Message	Displays the appropriate message in the Dependent Message group.	Models with full matrix displays
Daily Schedule	Displays messages or speeds on a schedule that repeats daily.	All models
Weekly Schedule	Displays messages or speeds on a schedule based on days of the week.	All models

After you've made changes, click the **Apply Changes** button to send them to the sign. Below are some examples of how the settings area may look differently depending on the mode selected. Also note that some features may be hidden if the attached product does not include them.

TraffiCloud Sign Manager v2.0	0.15				– o x
TraffiCloud Connection To	ools Help				
Current Profile: All Traffic S Cloud Status: Cloud Conn	iolutions Primary Account nected	Disc	onnect		ATS TraffiCloud [*]
Detected Devices Simulated	virtual Device	+ Dist	onnect		
Connection and Setup Home Sig	gn Settings Message Library	Dependent Message Library	Picture Management	Logs and Traffic Data	
Name: ats VirtualSign	Serial Number:	VirtualDevice	Live Controls	Advanced	Reload Apply Changes
Sign Mode Speed Display	•	SpeedAlert VMS 24"			
Speeds					T
Set Speed Limit to	25 🚖 MPH				
Collect traffic data from	0 🚖 MPH to 150	MPH			
Display speeds from	5 🔶 MPH to 85	MPH			
Blink at and above	1 🖨 MPH				
Strobe at and above	20 🖨 MPH				
Output Aux at and above	35 🖨 MPH for 3	sec :			
Hom at and above	35 🖨 MPH for 2	sec 🗧			
Radar Sensitivity	Low (Near)	High (Far)			
Alerts and Images					
Send Alert?	Threshold				
Low Battery	30 - %				
Very Low Battery	15 👻 🕺 Take Pic	ure? Image Quality			
Tamper		Medium -			
High Speed	40 🚔 MPH 🗌	Medium -			
Congestion	5 🔶 MPH 🗌	Medium -			
Awareness image every	120 🚔 minutes 🗌	Medium -			
If you have selected 'Send Aler Power	rt' & 'Take Picture', the alert en	ail will have the image attache	d.		
Supply Type AC	- Capacity 0	🖨 Ah			
Solar Panel Installed	Capacity 0	➡ Watts			
LED Display Brightness Range	1 🔹 Min to 10	Max			

[Figure 8] Speed Display mode

fraffiCloud Sign Ma	anager v2.0. ction Too	.16 ols Help									- 0
rrent Profile: Cloud Status: stected Devices	Cloud Conne Simulated V	ected îirtual Devic	e		*	Disco	nnect			Tra	ATS ffiCloud [™]
nection and Setup	Home Sign	n Settings	Message Lib	orary De	pendent Message	Library	Picture Management	Logs and Traffic	: Data		
Name: ats VirtualSign	ı		Serial Num	ber: Vi	rtualDevice		Live Controls	Advanced	i	Reload	Apply Change
Sign Mode Single N	Message	•		Sp	beedAlert VMS 24'						,
Speeds				-			Messages				
Set Speed Limit to Collect traffic data frr Display speeds f Blink at and abo Strobe at and ab Output Aux at ar Output Aux at ar Horn at and abo Radar Sensitivity Alerts and Images S Low Battery Very Low Battery	om irom ve bove end above ve Send Aler?	23 ▼ 0 ↓ 5 ↓ 1 ↓ 20 ↓ 35 ↓ 1 ↓ 20 ↓ 35 ↓ Low (Near	MPH to MPH to MPH to MPH MPH MPH for 2	150 🗘	MPH MPH sec sec to this the sec	Far)	# Name InstaMessage acc ahead move L acc ahead move L acc ahead move L acc ahead top acc fender bender amber alead stop acc fender bender amber alead stop acc fender bender amber alead stop acc fender bender amber alead stop acc fender bender amber alead stop buckle up its the la chevrons left chevrons right click it or ticket const caution rilgg const caution	kee w	Selected in List: Move Up Move Down Make Active Message Apply Instantly Active Message	Add New Edt Delet	Choose from Library
Tamper			1 divi		Medium	•	emer public tune evac route strait		Message # 0	InstaMessage	
High Speed		40 🜲	MPH		Medium	-	ice on bridge signal out stop ahe	ad			
Congestion		5 🜲	MPH		Medium	-	you drink you lose				
Awareness image e	very	120 🜲	minutes		Medium	•					
If you have selected Power	d 'Send Alert	'& 'Take Pi	cture', the ale	ert email w	vill have the image	attached.					
Supply Type AC		-	Capacity ()	Ah						
Solar Panel Insta	alled		Capacity ()	Watts						
	eee Ranne	1	Min to	10 🛋	Max						

[Figure 9] Single Message mode

fiCloud Connection	er v2.0.16 n Tools Hel	p							ATS
tected Devices	d Connected	се		Discor	nnect			Tra	affiCloud" 🤇 🥵
action and Setun Hom	 Sign Settings 	Mercade Librar	V Dependent Messa	ae Librany P	licture Management	Logs and Traffic I	Dətə		_
rection and Setup Thom	c orgination of	measage Loral	y Dependent Meaad	ge abialy 1	icture management	Loga and Traine I			
Name: ats VirtualSign		Serial Number	VirtualDevice		Live Controls	Advanced		Reload	Apply Changes
ign Mode Weekly Sch	edule 🔹 <		SpeedAlert VMS	24"	Weekly Schedu	Je	-		
Speeds					Sun Mon	Tues Wed T	hurs Fri	Sat	Copy Save Loa
Set Speed Limit to	25 🜲	MPH			Sunday Schedule	: Runs on Sundays	+ /	Add Window	- Remove Last Window
Collect traffic data from	0 💠	MPH to 150	➡ MPH		12:00 AM	to 12:00 AM	Sign Mode	e Single Message	~
Display speeds from	5 韋	MPH to 85	MPH		12.00 /111 -	12.00 Airi	Messag	Message	
Blink at and above	1 ≑	MPH			More Op	tions			Edit Choose
Strobe at and above	20 📮	MPH							
Output Aux at and at Uses at and above	00Ve 30 -	MPH for 3	sec						
			▼ sec						
Radar Sensitivity	Low (Nea	ar)	Hig	h (Far)					
Alerts and Images									
Send	Alert? Threshold	1							
Low Battery	30 🖨	%							
Very Low Battery	15 🜩	[%] Take Pi	cture? Image Qu	ality					
Tamper	·		Medium	•					
High Speed	40 🖨	MPH (Medium	•					
Congestion	5 🖨	MPH (Medium	•					
Awareness image every	120 🜲	minutes	Medium	-					
If you have selected 'Se Power	nd Alert' & 'Take P	Picture', the alert e	email will have the ima	ge attached.					
Supply Type AC	•	Capacity 0	🜩 Ah						
_		Capacity 0	Watts						
Solar Panel Installed									

[Figure 10] Schedule mode

TraffiCloud Sign Manager v2.0	0.16			- 🗆 X
TraffiCloud Connection To	ools Help			
Current Profile:				ATC
Cloud Status: Cloud Conn	ected			
Detected Devices Simulated	Virtual Device	- Disc	onnect	Tancioud
Connection and Setup Home Sig	n Settings Message Library	Dependent Message Library	Picture Management Logs and Traffic Data	
Name: ats VirtualSign	Serial Number:	VirtualDevice	Live Controls Advanced	Reload Apply Changes
Sign Mode Dependent Messag	je 🔹 🚽 🔤 🖬	SpeedAlert VMS 24"		
Speeds			Dependent Message	
Set Speed Limit to	25 ≑ MPH		New Edg	Character Library
Collect traffic data from	0 🚖 MPH to 150	MPH	New Edit	Choose from Library Copy to Library
Display speeds from	5 🜩 MPH to 85	MPH	Message Group Name: Speed Dependent N	len
Blink at and above	1 🖨 MPH		Description: Default Speed Dependent	endent Message for 24" signs
Strobe at and above	20 🜩 MPH		Message Dependent on: Speed	
Output Aux at and above	35 🜩 MPH for 3	sec		
Horn at and above	35 🜩 MPH for 2	sec	Condition	Message
Radar Sensitivity	Low (Near)	High (Far)	No Vehicles	Blank Message
Alerts and Images			Under Speed Limit	Have a Nice Day
Send Alert?	Threshold		Within 10 mph over the Speed Limit	Your Speed Slow
Low Battery	30 🜩 %		Between 10 and 20 mph over the Speed Limit	Your Speed Limit Slow
Very Low Battery	15 🚔 % Take Pictu	re? Image Quality	More than 20 mph over the Speed Limit	TOO FAST
Tamper 🗌		Medium -	Selected Condition's Message Preview	
High Speed	40 🚖 MPH 🗌	Medium -		40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -
Congestion	5 🖨 MPH 🗌	Medium 👻		
Awareness image every	120 🚔 minutes 🗌	Medium 🔹		
If you have selected 'Send Aler	t' & 'Take Picture', the alert ema	il will have the image attached		
Power	-			
Supply Type AC	- Capacity 0	Ah		
Solar Panel Installed	Capacity 0	Watts		na sakana 19 sakana 19 sakana 19 sakana
LED Display Brightness Range	1 ≑ Min to 10	Max		

[Figure 11] Dependent Message mode

ALL TRAFFIC SOLUTIONS

Using the Messaging libraries

Use the topics in this chapter to create additional messaging for your signs using the Messaging libraries. When you connect with TraffiCloud Sign Manager to full matrix, message-capable signs, Sign Manager displays the **Message Library** and **Dependent Message Library** tabs, where you can access all the messaging tools.

The Message I	Library tab is where	you set up and	store sign messages.
----------------------	----------------------	----------------	----------------------

TraffiCloud Sign Manage	ger v2.0.16				- 0 ×
TraffiCloud Connectio	n Tools Help				
Current Profile:					ATS
Cloud Status: Clou	id Connected		Discourse		TraffiCloud [™] (≘)
Detected Devices Sin	ulated Virtual Device	· · · · · · · · · · · · · · · · · · ·	Disconnect		Hundloud
Connection and Setup Hon	ne Sign Settings Message Li	ibrary Dependent Message	Library Picture Management	Logs and Traffic Data	
Filter List 🔽 24'' Mess	ages 🔽 18" Messages			Import From Traffic	Cloud Library
C:\Users	\Documents\/	All Traffic Solutions\Messages	Arrow Left Halloween.msgsld		
Name	Description	Created Date	Screen Size	# of Screens	New
0000Test	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	1	
0001Test	Describe the message here	Thu/2024-05-02 3:26 PM	Small	1	Edit
1	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	1	Сору
Acc ahead move L	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	3	
acc ahead move R	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	3	
acc ahead stop1	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	2	
acc fender bender kee	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	3	Show
acc fender bender kee_1	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	3	radar cutout
amber alert	Describe the message here	Thu/2024-05-02 3:26 PM	Small	3	
amber alert	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	3	Preview
amber alert_1	Describe the message here	Thu/2024-05-02 3:26 PM	Small	3	
amber alert_1	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	4	
Arrow Left Halloween	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	6	
arrow left	Describe the message here	Thu/2024-05-02 3:26 PM	Small	3	the dalley
arrow left	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	3	
arrow left_1	Describe the message here	Thu/2024-05-02 3:26 PM	Small	6	IIINN
arrow right	Describe the message here	Thu/2024-05-02 3:26 PM	Small	3	hAHV .
arrow right	Describe the message here	Thu/2024-05-02 3:26 PM	Standard	3	DALA

[Figure 12] The Message Library

A Message is a sequence of text and/or graphic screens that you display on your sign, looping them continuously.

You can create, edit, copy, or delete messages from the library. You can also import messages from your account's TraffiCloud Message Library.

TraffiCloud Sign Manager displays a preview of the selected message on the right-hand side of the window.

Use the filter at the top of the table to limit the view of messages to a particular compatible equipment size if both sizes are available.

You can also select messages from or add them to this library directly in the **Sign Settings** tab.

For information about creating and editing messages, see *Working with messages* below.

Working with messages

With TraffiCloud Sign Manager, you can create new or edit existing messages in the **Message Library** and **Dependent Message Library** tabs (available with message-enabled signs only). See also *About the Dependent Message Library* on page 24.



To access the message editing tools:

- 1. Connect to your sign and click the **Message Library** and **Dependent Message Library** tab, as needed.
- 2. From there, you can create new messages, edit existing ones, and copy and delete messages (see [Figure 12] on the previous page).
- 3. Use the following table for details about what you can do with messages:

Feature	What you can do
Messages	A Message is a sequence of text and/or graphic Screens that are displayed on a sign and looped through continuously. More details:
	 Messages are referenced by a Name but a more detailed description can be included. Choose the number of screens included immediately or add and remove them as needed. The Message size must match the type of equipment on which it will be displayed.
Screens	To edit a Screen, select a tab with the screen number on it.

Feature	What you can do
Screen Types	Screens have a selectable Type which dictates part of the format and information displayed. Here's a list of the screen types:
	Large, medium, and small lines are text only
	• Graphics (the drawing tool) gives you individual control of each LED pixel on the screen.
	• Speed Limit displays the value of the speed limit setting stored in the sign
	Your Speed displays the speed of an approaching vehicle (radar required)
	 Recommended for use as part of a Dependent Message only, otherwise the sign will display a speed of 0 when no vehicles are present.
	Clock screens show the current time in the preview.
	Note: The Your Speed message uses the speed detected at the beginning of the message only and is not updated again until the message loops. It's best to place it as the first screen in the message and keep the message short.
Screen	• Duration is the number of seconds a screen will be displayed until going to the next
Properties	Blink Types are no blinking, blinking, or inverting
	 Inverting blink is where illuminated parts of the screen go dark and non-illuminated parts light up for a time, then revert back to normal repeatedly.
	• Blink Rate is only relevant when the screen is set to blink or invert.
	• Slow is timed as 1 sec on / 1 sec off
	• Medium is timed as 0.75 sec on / 0.75 sec off
	• Fast is timed as 0.5 sec on / 0.5 sec off
	• Screen Power Usage indicates how much of the display is illuminated. It is a tool to help with battery conservation. Low power usage will translate to longer battery life.
	Note: Blinking a screen effectively halves its power usage.
Variable Text {x}	At certain times it may be desirable for a text screen to include a value that changes, such as the current day of the week. This is possible by using the {x} button to insert a placeholder for the variable text. When displayed, the sign will translate the placeholder into the actual value. For more information about this feature or custom applications please contact ATS at
	support@alltrafficsolutions.com.

About the Dependent Message Library

The **Dependent Message Library** tab stores Dependent Messages for your messaging signs. Dependent Messages are grouped messages used by variable message signs to show a variety of messages, depending on incoming traffic data, such as vehicle speed (radar speed sensor required). Dependent Message groups batch related messages, along with the conditions under which they should be displayed.

TraffiCloud Sign Ma	anager v2.0.16					_		×
TraffiCloud Conne	ction Tools Help							
Current Profile:						ATS		
Cloud Status:	Cloud Connected					TraffiClou	ud™ (
Detected Devices	Simulated Virtual Device		- Disc	onnect		indificiou		
Connection and Setup	Home Sign Settings M	lessage Library Depend	lent Message Library	Picture Management	Logs and Traffic Data			
Filter List 🔽 24" M	Messages 🗌 18'' Messa	ages						
C:\Users\	Do	cuments\All Traffic Solution	ons\Dependent Mess	ages\Conditional Mess	age_1.depsld			
Name	Description	Created Date	Screen Size	Depends On	New Edit	Сору	Dele	ete
Conditional Message	Describe the messag	Thu/2024-05-02 2:4	Standard	Speed	Selected Dependent Message			
Conditional Message	. Describe the messag	Thu/2024-05-02 2:4	Standard	Speed	Name: Conditional Message_1			
Conditional Message_	1 Describe the messag	Wed/2024-06-12 10:	Standard	Speed	Dependent Type: Speed			
							_	
						Messa	ge	
					Lader Speed Limit	Get your bood		
					Within 10 mph over the Speed Limit	Careful now		_
					Between 10 and 20 mph over the	TOO FAST		
					More than 20 mph over the Speed	Drive Fast City or J	ail	_
					Selected Condition and Massess R			
					Selected Condition and Message P	review	Animat	bot
					blank		Previe	ew
					1			

[Figure 13] The Dependent Message Library

You can create, edit, copy, or delete Dependent Messages from this library.

TraffiCloud Sign Manager displays a preview of the selected dependent message at right, where each message and its dependency can be viewed.

Use the filter at the top of the table to limit the view of dependent message groups to a particular compatible equipment size.

You can create new Dependent Messages or select from this library directly on the **Dependent Message Library** tab as well.

For more information about Dependent Messages, see *Working with Dependent Message Groups* on the facing page.

Working with Dependent Message Groups

Use this topic for help working with setting up **Dependent Message Groups**.

Dependent Message Group			
Message Group Size:	24"	Sav	re Cancel
Message Group Name:	Conditional Message		
Message Group Description:	Describe the message here		
Messages Dependent on:	Speed ~		
Co	ndition	Message	
No Vehicles		blank	
Under Speed Limit		Get your head	
Within 10 mph over the Spee	ed Limit	Careful now	
Between 10 and 20 mph ove	r the Speed Limit	TOO FAST	
More than 20 mph over the S	õpeed Limit	Drive Fast City or Jail	
Selected Condition and Me	essage		
	New Edit Cho	ose from Library Copy to Library	Animated Preview
(Over the speed limit by 10 but not 20	mph over the speed limit	
1 2 SLOW YOU DOWN SPE	IRVV TOO EDAA FAST!		

[Figure 14] The Dependent Message Group window

Dependent Message Group types

Your initial TraffiCloud Sign Manager installation includes the following dependent message group types, which you can revise or use to suit your needs.

Use the following table as a reference about each of the Dependent Message Groups:

Dependent Message group	What you can do
Detected Speed	Display an appropriate message based on the detected speed of an approaching vehicle. Often used for traffic calming. Radar speed sensor required.
Timer Value	Display different messages based on the value of the internal timer. Often used for New Year's countdowns or to display race information. Manual timer start and stop control is usually required. (The timer should not be used as an official timekeeping device).
Digital Inputs	Display different messages based on digital input values. Custom firmware and wiring is required. Contact support@alltrafficsolutions.com or your regional sales rep if you're interested in using this feature.
String Value	Send a string of text characters to the sign compared with a pre-determined value. If the strings match, the corresponding message displays. You can send text strings to the sign manually using the Live Values area of the PC software. Use the string 1 value. For more information support@alltrafficsolutions.com or your regional sales rep.
Analog Input	Display different messages based on the value of an analog input. Custom firmware and wiring is required to use this type of Dependent Message group. Contact <u>support@alltrafficsolutions.com</u> or your regional sales rep if you're interested in using this feature.

To create or edit Dependent Messages:

- 1. Connect to your sign and click the **Dependent Message Library** tab. The Dependent Message Group window opens.
- 2. From there, you can create new Dependent Message Groups, edit existing ones, and copy and delete them (see *[Figure 14] on the previous page*). In the Dependent Message Group shown in the example, here are the key details:

Condition	Message
No Vehicles	Blank
Under Speed Limit	HAVE A NICE DAY
Within 10 mph over the Speed Limit	SLOW DOWN
Between 10 and 20 mph over the Speed Limit	SLOW DOWN NOW
More than 20 mph over the Speed Limit	TOO FAST

The table shows the five screens in the dependent message, each with a different condition: **No Vehicles**, **Under Speed Limit**, **When 10 mph over the Speed Limit**, **Between 10 and 20 mph over the Speed Limit**, and **More than 20 mph over the Speed Limit**. Each of those conditions is associated with a specific message.

- 3. Now you can do any of the following:
 - To change any of the associated messages, select that screen in the table and click the **Choose from Library** button, as shown:

Dependent Message Group				×
Message Group Size:	24"		Save	Cancel
Message Group Name:	Conditional Message - gb			
Message Group Description:	Describe the message here			
Messages Dependent on:	Speed ~			
Co	ndition		Message	
No Vehicles		Blank		
Under Speed Limit		HAVE A NICE DAY		
Within 10 mph over the Spee	ed Limit	SLOW DOWN		
Between 10 and 20 mph ove	r the Speed Limit	SLOW DOWN NOW	/	
More than 20 mph over the S	Speed Limit	TOO FAST		
Selected Condition and Me	essage			
	New Edit Cho	iose from Library	Copy to Library	Animated Preview
	Under the speed limit			
1				
HAVE A NICE DAY				

[Figure 15] Choosing from the library

- To edit a message, select a condition screen and click the **Edit** button.
- Similarly, you can create a new message, copy the message to the library for future reference, or play an animated preview of the selected message.

Managing pictures

On the **Picture Management** tab, you can do the following for your connected device:

- Download and view images taken by your signs,
- Take and review test images,
- Add comments to individual images,
- Print images, along with their corresponding metadata,
- Use filters to sort images by date and time taken or by trigger type, and
- View picture settings and the number of pictures stored in memory in the **Camera Information** section.

TraffiCloud Sign I TraffiCloud Con	Manager v2.0.16 nection Tools	Help							-	
Current Profile:									ATS	
Cloud Status:	Cloud Connected			-					Trafficio	ud ^a
Detected Device:	Simulated Virtual	Device	-	Disconn	ect				rancio	uu
onnection and Setup	Home Sign Set	tings Message Libra	ary Dependent Me	ssage Library Picto	ure Management	Logs and Tra	ffic Data			
Filter				Camera Informatio	0			_		
Date/Time Ran	ge 🔽 Select All	Image Type	Select All	Power Profile: P	ower Saver				Download f	rom Sign
6/12/2024 1	12:00:00 AM	User Trig	ered Images	Span Delay: 0	ower Saver	Refresh			Upload to Tra	ffiCloud Site
to		Awarenes	s Images	Number of Stored	Images: 14			-		_
6/20/2024 1	12.00.00 AM	High Spe	ed Events						Erase Photo	is on Sign
6/20/2024	2:00:00 AM	Tamper E	vents						Test Ca	mera
Timestamp	Image Type	Condition	Display On	Device Name	Resolution	File ^	Image Deta	_		
4/30/2014 1:19	HighSpeedEvent	Speed: 53			High	396	Name	testing jpg		_
4/30/2014 1:18	High Speed Event	Speed: 53	2		High	400	Time	11/29/2013 4:54	:53 PM	Print
4/30/2014 1:17	HighSpeedEvent	Speed: 53			High	395	Trippe	High SpeedEvent Sneed: 53	Display On	Öpen
4/30/2014 1:16	HighSpeedEvent	Speed: 53			High	399	Reolution	High	Size 14 Kb	
4/30/2014 1:15	HighSpeedEvent	Speed: 53			High	396	Device			Delete
4/30/2014 1:14	HighSpeedEvent	Speed: 53	2		High	396	Comments:	_		^
4/30/2014 1:13	HighSpeedEvent	Speed: 53			High	396	Edit			~
4/30/2014 1:11	High Speed Event	Speed: 53			High	401	and the second second			
4/30/2014 1:10	High Speed Event	Speed: 53			High	393				
4/30/2014 1:09	HighSpeedEvent	Speed: 53	2		High	383		an	aller.	
4/30/2014 1:07	HighSpeedEvent	Speed: 53	Z		High	397	-			TER
4/30/2014 1:06	High Speed Event	Speed: 53			High	395	Aller alla	A Martin	100100.00	Actions
4/30/2014 1:05	HighSpeedEvent	Speed: 53			High	397		and a supplicit	and the second s	10000
4/30/2014 1:04	HighSpeedEvent	Speed: 53			High	395				
4/30/2014 1:03	HighSpeedEvent	Speed: 53			High	397			3	
11/29/2013 4:54	HighSpeedEvent	Speed: 53			High	148			2	
7/30/2013 1:44	TamperEvent		\sim		Medium	971			1.0	
						~				

[Figure 16] Picture Management tab



Working with logs and traffic data

To download traffic data and other logs from attached equipment, use the **Logs and Traffic Data** tab. The downloaded data is stored in individual files and shows up in the list. Once you download the data, you'll then upload it to TraffiCloud, where you can run reports. For additional details, please refer to the video, "Retrieving Data Through Sign Manager": Use the QR code at right to open the video from your mobile phone or click the following link: https://www.youtube.com/watch?v=QHRyrChs-n8



To upload traffic data to TraffiCloud:

FraffiCloud Connection	Tools Hel	p							
Current Profile: All Tr	affic Solutions							Δ.	тс
Cloud Status: Cloud	Connected								
Detected Devices All T	raffic Solutions De	evice	-	Connect				Traffi	Cloud
onnection and Setup Mess	age Library Dep	endent Message Libra	ry Picture M	lanagement Logs ar	nd Traffic Data				
Filter				Sign Log Status				Down	load from Sign
Date/Time Range 🗹	Select All	Hile Type 🗹	Select All	Power Log:	Refresh	1			-
6/ 6/2024 12:00:00	AM 🔲 🕆	Standard Logs		Light Log:				Upload to	o TraffiCloud Sil
to				Settings Log:				Erase	Logs on Sign
C/14/2024 12:00:00				Troffic Loca:					
0/14/2024 12:00:00	AM ≑			france bog.					
0/14/2024 12:00:00		CL::)T (D)) T (C D)	Speeds Log:	- MAIN CT. W	D16 14 K		Data A	nalysis Tutoral
D:\\\Doc	Cuments All Traffic	: Solutions\Traffic Data	a∖Traffic Data	Speeds Log: 2-9-2024 [500 BLK I	E MAIN ST - WI	B]fixed.tdf		<u>Data A</u>	nalysis Tutoral
D: 14/2024 12:00:00 D: 16/ 10/ 10/ 10/ 10/ 10/ 10/ 10/ 10/ 10/ 10	AM 🗢 cuments\All Traffic Log Type	Solutions∖Traffic Data	a\Traffic Data Erased From Sign	Speeds Log: 2-9-2024 [500 BLK I Device SN	E MAIN ST - WI Device Name	B] fixed.tdf Sent to TraffiCloud	Site	Data A	nalysis Tutoral View
0/14/2024 12:00:00 D: \Doc File Name WB NE 106 EO N Easter	AM 🔹 cuments\All Traffic Log Type Traffic Data L	o Solutions∖Traffic Data Date Created ▼ 7/27/2023 1:40 PM	a∖Traffic Data Erased From Sign ☑	Speeds Log: 2-9-2024 [500 BLK I Device SN 12964918011330	E MAIN ST - Wi Device Name ats1330	B] fixed.tdf Sent to TraffiCloud	Site	Data A	nalysis Tutoral View Renam
D: \Doc File Name WB NE 106 EO N Easter Virginia SO 101-21df	AM 🗼 cuments\All Traffic Log Type Traffic Data L Traffic Data L	Solutions\Traffic Data Date Created 7/27/2023 1:40 PM 7/27/2023 1:40 PM	a\Traffic Data Erased From Sign	Device SN 12964918011330 12964918011330	E MAIN ST - Wi Device Name ats1330 ats1330	B] fixed.tdf Sent to TraffiCloud	Site	Data A Comments	nalysis Tutoral View Renam
D: NDoc File Name WB NE 106 EO N Easter Virginia SO 101-21df Virginia SO 101-11df	AM 😦 cuments\All Traffic Log Type Traffic Data L Traffic Data L Traffic Data L	Solutions\Traffic Data Date Created ▼ 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM	a\Traffic Data Erased From Sign	Speeds Log: 2-9-2024 [500 BLK I Device SN 12964918011330 12964918011330 12964918011530	E MAIN ST - Wi Device Name ats1330 ats1330 ats1530	B] fixed.tdf Sent to TraffiCloud	Site	Data A Comments	Nalysis Tutoral View Renam
b: 142024 12:0000 D: \Doc File Name WB NE 106 EO N Easter Wrginia SO 101-2tdf Vrginia SO 101-1tdf Traffic Data 9-25-2020B.tdf Traffic Data 9-25-2020B.tdf	AM 😦	Solutions\Traffic Data Date Created 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM	a\Traffic Data Erased From Sign	Speeds Log: 2-9-2024 [500 BLK I Device SN 12964918011330 12964918011330 12964918011530	E MAIN ST - WI Device Name ats1330 ats1330 ats1530 ats0130	B] fixed.tdf	Site	Data A	Renam Edit Com
b: 1422024 1210000 D: \Doc File Name WB NE 106 EO N Easter Wrginia SO 101-12.tdf Traffic Data 9-25-20208.tdf Traffic Data 9-25-2020.tdf Traffic Data 9-25-2020.tdf	AM Comments All Traffic Log Type Traffic Data L Traffic Data L Traffic Data L Traffic Data L Traffic Data L	Solutions\Traffic Data Date Created ▼ 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM	a\Traffic Data Erased From Sign	Speeds Log: 2-9-2024 [500 BLK I Device SN 12964918011330 12964918011330 12964918011530 12964918010130 12964918010230	E MAIN ST - WI Device Name ats1330 ats1330 ats1330 ats1530 ats0130 ats0230	B] fixed.tdf Sent to TraffiCloud	Site	Data A Comments	Nalvsis Tutoral View Rename Delete Edit Comm
b: 142024 12:0000 D: \Doc File Name WB NE 106 EO N Easter Wrginia SO 101-21df Yrginia SO 101-11df Traffic Data 9-25-2020B1df Traffic Data 9-25-2020Idf Traffic Data 9-25-2020Idf Traffic Data 72123.tdf	AM Comments All Traffic Log Type Traffic Data L Traffic Data L Traffic Data L Traffic Data L Traffic Data L Traffic Data L Traffic Data L	Solutions\Traffic Data Date Created 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM 7/27/2023 1:40 PM	a \Traffic Data Frased From Sign	Taine Edg. 2-9-2024 [500 BLK I Device SN 12964918011330 12964918011530 12964918010130 12964918010230 12964918010430	E MAIN ST - WI Device Name ats1330 ats1330 ats1330 ats1530 ats0130 ats0230 ats0104	B] fixed tdf	Site	Data A Comments	Nalvsis Tutoral Renam Delete Edit Comm Split Log

1. Connect to your sign in Sign Manager, and click the **Logs and Traffic Data** tab.

[Figure 17] Logs and Traffic Data tab

- 2. Click the **Download from Sign** button to transfer the file to your PC.
 - NOTE: You can change the file name, but don't change the default file location. For the file upload to work, the file must first download to the default local folder that your PC and TraffiCloud Sign Manager use for your files. The current file storage folder is shown at the bottom of the **Connection and Setup** tab.
- 3. In Sign Manager, select the downloaded file and click the **Upload to TraffiCloud Site** button.
- 4. Do one of the following:
 - A. If your preferred Site is in the list, select it and click the **Upload** button to assign the data to an existing **Site**.
 - B. If you need to create a new Site, click the **New** button and create the new **Site** in TraffiCloud (you may be prompted to login at <u>portal.trafficloud.com</u>). For help with creating Sites, please see the <u>Creating and Assigning Sites in TraffiCloud</u>.

After you add the Site, click the **Refresh** button in TraffiCloud Sign Manager to display it. Select the Site and click the **Upload** button to assign the data to the new **Site**.



Note: It may take a few moments before the data is available to run your reports.



NOTE: Once a file is uploaded, it should not be uploaded again, otherwise duplicate data will be written and result in doubling of traffic counts.

5. Once the data is uploaded, you can run the following reports from the TraffiCloud **Reports** tab:

Standard Reports	
Volume by Time	Provides traffic counts by hour and date.
Volume by Speed	Provides traffic counts by 5-mph (8-kph) and 10-mph (16-kph) increments.
Basic Speed Summary	Provides vehicle speed statistics, including numbers of violators, vehicles inside the threshold speed limit, and number of compliant motorists by time of day.
Raw Data Export	Generates data for all traffic by date, including speed measurements (maximum, minimum, mean, 85%, median, and pace speed).

For more details about this procedure, please see the video linked at the beginning of this topic. For live technical support, please see *Contacting Customer Support* on the facing page.

Contacting Customer Support

For support for your All Traffic Solutions products,

- » visit the Customer Support page at https://www.alltrafficsolutions.com/support/,
- » send email to support@alltrafficsolutions.com, or
- » call 1-866-366-6602, Option 2 anytime between 8:00 a.m. and 6:00 p.m. Eastern Time, Monday to Friday.

Technical documentation and training

Please visit the Customer Support page for links to our technical documentation.

Please contact Customer Support to discuss your TraffiCloud training options. For online training resources, please visit our **TraffiCloud Training Videos Hub** at <u>https://flow.alltrafficsolutions.com/hub-training-video-trafficloud-0-0-0-0.</u>







All Traffic Solutions All Traffic Solutions. 14201 Sullyfield Circle, Suite 300, Chantilly, VA 20151 P. 866-366-6602 E. <u>sales@alltrafficsolutions.com</u> [®]All Traffic Solutions