

# Getting Started with TraffiCloud: Shield Radar Speed Signs





Shield 12 Shield 15

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# About this document

This Getting Started Guide is meant for anyone who needs to set up Shield Radar Speed Signs using TraffiCloud. It provides an introduction to TraffiCloud and describes the basic use and configuration of the system, including the following:

- » Setting display options for your signs
- » Specifying the Sites for your signs
- » Assigning signs to Sites
- » Monitoring the traffic data collected by your signs

This guide presumes that you have already unpacked and set up your signs, per the included *Sh12* and *Sh15* Quick Start GuideInstALERT 18/SpeedAlert 18 Quick Start Guide or InstALERT 24/SpeedAlert 24 Quick Start Guide.



TIP: Before deployment to the road, you'll need to power up your signs, and then use TraffiCloud to set up a Site and add it to your sign. Those are the basic steps to ensure that you can generate traffic reports. If you can't get a signal indoors, try a better location, pointing the antenna towards a window, or take your sign outdoors.

# Browser requirements

TraffiCloud has been tested with all the leading Web browsers, and works best with Google Chrome.

## **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.
Italics	Used to place emphasis on certain words.
Right chevron >	Used to indicate a sequence of commands (and sub commands) to be carried out in the displayed order. For example, <b>Equipment tab &gt; Nickname</b> 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 are used to advise users of specific actions that could result in a loss of data.



WARNING: Warnings are used to advise users of specific actions that could result in personal physical injury or damage to equipment.

# Contacting Technical Customer Support

For support for your All Traffic Solutions products,

- » visit the Technical 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. to 6:00 p.m. EST, Monday to Friday.

#### **Technical documentation**

Please visit our <u>ATS Start-Up Guides</u> page for links to the most recent versions of our technical documentation.

Also, please visit our YouTube page, at TraffiCloud Training Videos for Shield Devices.

# Chapter 1

# Overview

All Traffic Solutions Shield Radar Speed Signs and all data-enabled radar displays make it easy to collect highly accurate, report-ready data from any Internet-connected device.

ATS devices not only collect the traffic data you need to produce reports, but they automatically upload data remotely and securely to TraffiCloud, so that you don't have to drive to each sign to perform data collection. TraffiCloud is a Web-based display sign management solution developed by All Traffic Solutions. It features the convenience of the cloud to enable you to monitor and manage all aspects of your Shield Radar Speed Signs without installing and maintaining the software on your local computers.

An added bonus is that you can generate reports using a variety of metrics, making it easier to track key data, such as 85th percentile speeds, and many others with just a few clicks of the mouse.

With Shield 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.

With Shield Radar Speed Signs and TraffiCloud you can do the following:

- » Monitor and manage your signs and their Sites,
- » Configure the display settings of your signs,
- » Set up and review alerts from the signs,
- » Generate and print statistical reports based on data gathered by the signs.

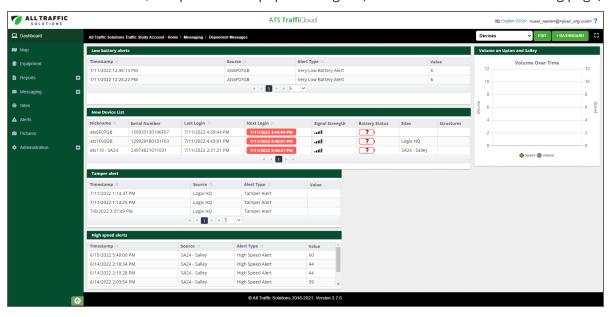
# Before you begin

Before you begin using Trafficloud with your Shield Radar Speed Signs, there are a couple of things that you need to do. Turn the sign on and verify that it starts up correctly, and then take note of the serial number of the sign. This serial number is used to identify the sign to All Traffic Solutions Technical Customer Support, and enables you to specify which sign is installed in which location.

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# Exploring the TraffiCloud user interface

The Trafficloud home page includes a **navigation** menu, referred to as "tabs", along the left side of the window, a header bar including user settings at top right, the main window, and a footer bar. Click any of the tabs to explore what you can do. The main window in the example in [Figure 1] below shows the **Dashboard**, setup with some popular widgets (see *The Dashboard* on the facing page).



[Figure 1] The TraffiCloud User Interface

## Navigation menu tabs

The following table describes what you can do with the navigation menu tabs:

Icon	Tab	Description
	Dashboard	Opens the <b>Dashboard</b> page, where you can set up dashboards and widgets to display alerts, devices, and traffic volume over time. See <i>Using the Dashboard</i> on page 75.
M	Мар	Opens the <b>Map</b> page, where you can check your Sites for conflicts on Google Maps. See <i>Understanding the Map page</i> on page 58.
	Equipment	Opens the <b>Equipment</b> page, where you can set your device mode, speed settings schedules, alerts, and more. With Shield signs, <b>Speed Display</b> 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. See <i>Configuring your sign</i> on page 19.
T <sub>II</sub>	Reports	Opens the <b>Reports</b> page, where you can generate <b>Traffic</b> reports for your Sites. See <i>Generating Reports</i> on page 41.

Icon	Tab	Description
	Sites	Opens the <b>Sites</b> page, where you can add new Sites and view and edit existing ones. See <i>Creating a Site</i> on page 15.
A	Alerts	Opens the <b>Alerts</b> page, where you can view alerts generated by your signs. Alerts are sent to TraffiCloud immediately, whenever they are triggered. See <i>Checking Alerts</i> on page 65.
Ō	Pictures	Opens the <b>Pictures</b> page, where you can view photos taken by your signs. See <i>Checking Pictures</i> on page 71.
<b>©</b>	Administration	Opens the <b>Administration</b> page, where you can perform administrative activities, like managing your account, equipment, users, entitlements, integration accounts, and uploads. See <i>Administration</i> on page 81.

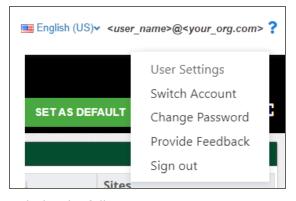
### The Dashboard

When your Trafficloud account is first set up, you'll see a default Dashboard in the main viewing pane. Dashboards are meant to give you a quick overview of your All Traffic Solutions devices and activity, and are made up of components called "widgets", which add features to websites.

See [Figure 1] on the previous page and Using the Dashboard on page 75.

#### The User menu

Use this section for details about the **User** menu.



The TraffiCloud **User** menu includes the following:

Menu item	Description
User Settings	Opens the <b>Edit User</b> window, where you can change your information, allow TraffiCloud text messaging for the account, add phone numbers, and more. See <i>Editing a user</i> on page 84.
Switch Account	Switches between TraffiCloud accounts if you have more than one. You can also change the default account by clicking <b>Switch Account &gt; Make Primary</b> .

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Menu item	Description	
Change Password	Opens the <b>Change Password</b> page.	
Provide Feedback	Opens a page where you can send feedback about TraffiCloud to Technical Customer Support.	
Sign out	Opens the <b>Sign out</b> menu, where you can confirm that you want to sign out.	

# Chapter 2

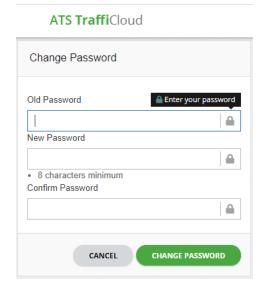
# Signing in to TraffiCloud for the first time

Once you have a Trafficloud subscription, All Traffic Solutions registers your users' email addresses as their user names, and sends them a Welcome email with a temporary password and a link to Trafficloud. If this is your first time using an ATS sign with Trafficloud, make sure the purchaser has set up a user account for you.

#### To sign in to TraffiCloud:

- 1. In the Welcome email from All Traffic Solutions, click the **Join All Traffic Solutions** <**your account name**> **Account** link, or click here:
  - https://portal.trafficloud.com/login
- 2. In the **Sign In > Email** box, enter the email address and temporary password provided in the Welcome email.

3. Click the **Sign me in** button. You'll then be prompted to create a new password.



[Figure 2] The Change Password window

- A. In the **Old Password** box, enter the password from the Welcome email (you can copy and paste it, just make sure no trailing space is added).
- B. In the **New Password** and **Confirm Password** boxes, enter a new password. Passwords must have a minimum of eight characters, and we recommend including at least one special character, number, uppercase letter, and lowercase letter. Password rules can be defined by your TraffiCloud administrator. You can also let your Web browser suggest and save a secure password.
- c. Click the Change Password button.

The TraffiCloud **Dashboard** page opens and confirms that you have successfully changed your password. You can reset your password as needed using **Change Password** on the TraffiCloud **User** menu.

# Signing out of TraffiCloud

Use this procedure to sign out of TraffiCloud.

#### To sign out of TraffiCloud:

» Click your user name in the top-right corner of the page, and click **Sign out**.



[Figure 3] The User menu > Sign out

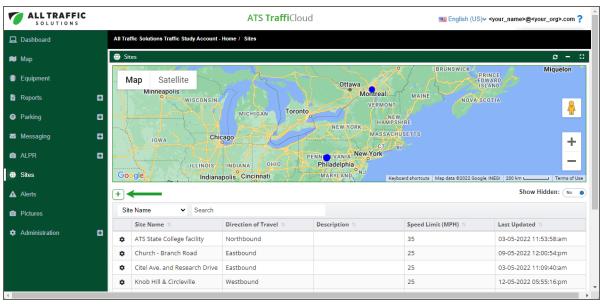
# Chapter 3

# Creating a Site

The first thing you'll need to do to get started using your signs with TraffiCloud is to create at least one Site for each sign. Sites are the key to generating traffic reports, because TraffiCloud organizes traffic data for reports by Site. You can perform these steps before (recommended) or after you install a sign at a physical location. For details about physical setup, refer to the included *Sh12 and Sh15 Quick Start GuideInstALERT 18/SpeedAlert 18 Quick Start Guide* or *InstALERT 24/SpeedAlert 24 Quick Start Guide*.

#### To create a Site in TraffiCloud:

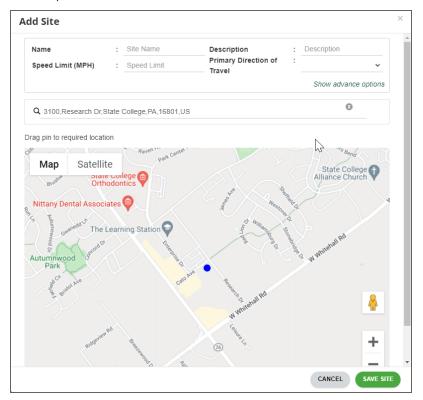
1. On the navigation menu, click **Sites** and then click the **Plus** sign tunder the map.



[Figure 4] The Sites page > Add Site button

Creating a Site p. 15

# The **Add Site** window opens.



[Figure 5] The Add Site window

# 2. Enter the following details:

Setting	Description	
Name	Enter a Site name that will identify the location for the sign in the Sites list. For example, Whitehall Road.	
Description	Optionally, enter a description for the Site.	
Speed Limit	Enter the speed limit for the Site.	
Primary Direction of Travel	Select the primary direction of travel: <b>North</b> , <b>South</b> , <b>East</b> , or <b>West</b> . If the street direction is between two of the primary directions, choose the closest one. Shield signs do not detect bidirectional traffic.	
	Note: Once you have report data for a Site, it's best not to change the direction of travel. Instead, create a new Site for that direction.	

# Description Setting **Address** Enter an address for the Site using one of the following methods. The blue dot represents the Site for your sign on the map. In the address search box, enter the address or intersection where the sign will be located. The address field displays pattern matches for the address as you type. Select the address from the list. You can also copy and paste an address from your address book. Add Site Name Citel Ave and Research Drive Speed Limit (MPH) Primary Direction of Travel Q Cato Av and Resarch Drive Cato Ave & Research Drive Ferguson Township, PA, USA or Zoom the map until you can see street names. To zoom in, Do any of these: Roll the middle mouse button forward, use the + **sign** on the bottom right corner of the map, or click the keyboard + key. See the Keyboard Shortcuts at the bottom-right corner of the map as well. As you zoom, click and hold the mouse button on the map to drag and reposition your view of the blue dot or status marker. Drag the blue dot to the planned location. The goal is to move the dot to within 100 feet of the Site address.



TIP: You can also use Google **Satellite view** or drag the **Pegman** onto the map to switch to **Street view**. Drag the Pegman to the blue dot and release the mouse button when you see the street view popup.



3. Click the **Save Site** button. Your Site will appear in the **Sites** list in the main window. By default, only active Sites show in the list. Click **Show Hidden** to show all Sites, including active and hidden Sites.

If you'll be using a sign at multiple Sites, you can repeat the above steps for those Sites or add them later.

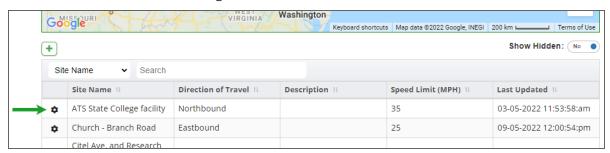
Creating a Site p. 17

# Editing a Site

Use this procedure to edit an existing Site.

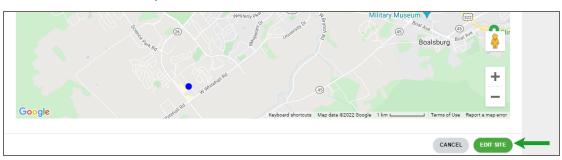
#### To edit a Site:

1. Click the View Sites button, the cog icon next to the Site name in the **Sites** list.



[Figure 6] The View Sites button

2. In the **View Site** window, click the **Edit Site** button.



[Figure 7] The View Site window

3. Make your changes and click the **Save Site** button. Your changes appear in the Sites list.

# Chapter 4

# Configuring your sign

The place to configure your sign is the **Equipment** tab. The initial **Equipment** page displays a table with controls to edit the settings for your sign and identifying information, including nickname and serial number, the assigned Site, last and estimated next communication, and status.

You can also click the **Pencil** icon or even the **History** icon to open an **Equipment** details page, where you can set your sign's

- Sign Mode, the type of information the sign displays, such as vehicle speed for radar-enabled signs, and daily and weekly schedules.
- » **Assigned Site**, the location TraffiCloud recognizes where you plan to place the sign. The Site is also key to preparation of reports.
- » Speed settings, such as speed limit, speed slots (when to collect data), speeds to display and when to blink or strobe (if equipped), and radar sensitivity,
- » **Alerts and Images**, configurations for low battery, tampering, high and low speed (traffic congestion) events, and whether to take pictures and at what resolution.

#### Topics in this chapter:

Assigning a Site to your sign	20
Understanding Sign Modes	22
When do Shields call in?	23
Performing a traffic study	23
Configuring speed settings	25
Setting up speed schedules	27
Configuring Alerts and Images	35
Setting a new Nickname for your sign	38

# Assigning a Site to your sign

Once you have created a Site, the next thing you'll need to do is assign a sign to the Site using TraffiCloud.

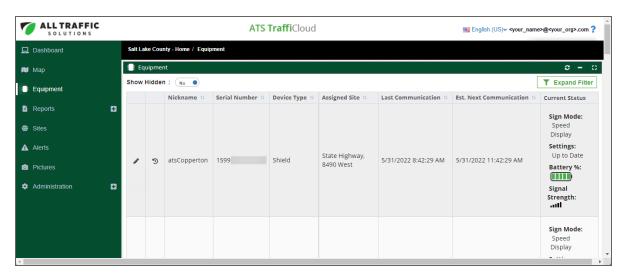
You can perform these steps before or after you install the sign on location, but we recommend performing them before you place the sign on location so you'll have your data as soon as the sign is placed on Site.

#### To assign a Site to your sign:

1. On the navigation menu, click **Equipment** and then click the Pencil icon next to the sign you want to assign the Site to. The **Equipment** details page opens.

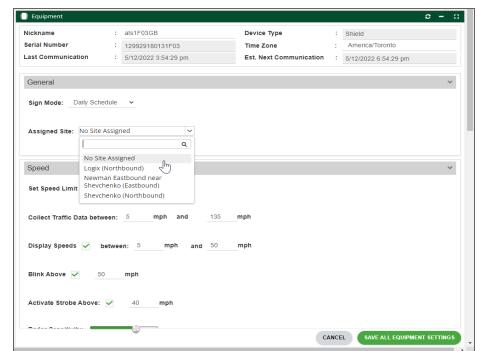


TIP: If you need to filter the list, click **Expand Filter**. You can filter by nickname, serial number, device type, Site, last communication, and power level.



[Figure 8] The Pencil icon

Verify your preferred Sign Mode. With Shield Radar Speed Signs, the default is set to Speed
 Display. The sign mode default varies by device type. See Understanding Sign Modes on page 22.



3. In the **Assigned Site** box, click the down arrow and select your Site.

[Figure 9] Equipment > Assigned Site box



TIP: If you need to unassign a Site from a sign, in the **Assigned Site** box, select **No Site Assigned**.

- 4. A prompt appears asking if you want to apply the speed limit to the sign that you specified when you created the Site. Click **Yes** to confirm. If you want to change the speed limit, you can click **No** and change it on the **Equipment** page. The Site will now be assigned to your sign.
- 5. Click the Save All Equipment Settings button.

# **Understanding Sign Modes**

ATS signs and devices include a variety of display modes, depending on the capabilities of your sign. Here's what you'll find for **Sign Modes** with Shield signs:



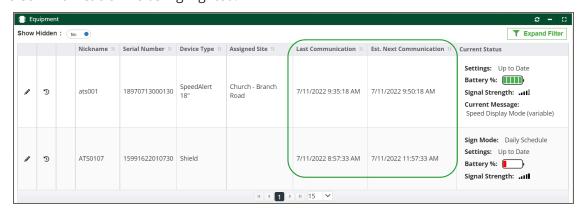
[Figure 10] The Equipment page: Sign Modes

Sign Mode	Description
Display Off	Collects traffic and status data, but doesn't display it on the equipment. This mode is recommended for performing traffic studies at a Site. See <i>Performing a traffic study</i> on the facing page.
Speed Limit Sign	Displays the configured speed limit, but the sign still collects data and blinks and strobes based on your sign settings for speed warnings as vehicles pass through the sign's radar detection zone. See <i>Configuring speed settings</i> on page 25.
	Note: If you use this setting, to avoid driver confusion be sure to remove the <b>Your Speed</b> faceplate.
Displays the detected speed of oncoming vehicles, adjusting as vehicles change speeds and pass through the sign's radar detection zone. With Shield signs, <b>Speed Display</b> 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. See <i>Configuring speed settings</i> on page 25.	
Scheduling Using TraffiCloud daily and weekly schedules, you can adjust the speed limit for your sign during scheduled periods of the day or week, such as for deployment to school zones when students are attending school, or for construction zones during work hours.	
<b>Daily Schedule</b> Adjusts the speed limit used for your sign during scheduled periods of the consequence See Setting up a daily schedule on page 27.	

Sign Mode	Description
Weekly Schedule	Adjusts the speed limit used for your sign during scheduled periods of the day and week. Setting a weekly schedule is more appropriate than a daily schedule for school or construction zones, where the speed reduction would usually be necessary only on workdays and during working hours. See <i>Setting up a weekly schedule</i> on page 30.

## When do Shields call in?

Here's a quick overview of how Shield Radar Speed Signs communicate back to TraffiCloud, both to pick up new settings and to upload traffic data. You can check for the last call-in on the **Equipment** summary page. Here's an example of what you'll see, with the **Last Communication** and **Estimated Next Communication** fields highlighted:



[Figure 11] The Equipment summary page > Last and Est. Next Communication

You can also set up a **Device List** widget in the **Dashboard** to track sign status and properties. See *Setting up a Device List Dashboard widget* on page 79.

#### About call-in scheduling

#### Shield signs:

- » Send Alerts back to TraffiCloud immediately,
- » Send traffic data and download settings changes every three hours.

Shield call in frequency		
Alerts	Traffic Data	Settings
Immediately	Every 3 hours	Every 3 hours

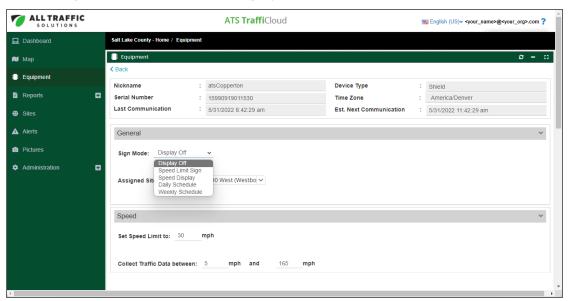
# Performing a traffic study

If you want to perform a traffic study, we recommend setting ATS radar-enabled display signs to **Display Off** mode, also referred to as "stealth mode". In this mode, the signs still collect data but appear to be turned off, which should eliminate the traffic calming influence of having the speed display turned on.

For example, you could install the sign in a new location, leave the display off for a week to collect the data, and run a **Compliance & Risk** report to get a feel for whether speeding is a significant issue in that location. Then, you could turn the **Speed Display** mode on, collect the data for another week and compare the differences.

### To set up Display Off mode:

- 1. Open the **Equipment** tab, and click the **Pencil** icon next to the sign you want to use for your study. The **Equipment** page opens.
- 2. Click the **Sign Mode** box, and select **Display Off**.



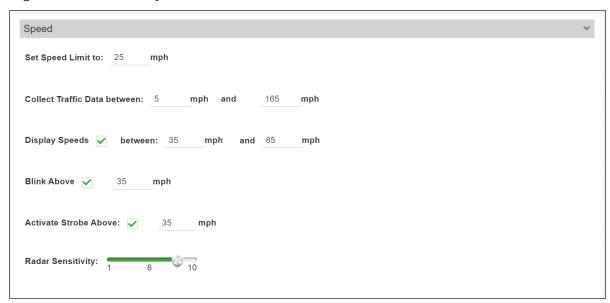
[Figure 12] Equipment > Sign Mode

3. Click the **Save All Equipment Settings** button. The sign display turns off the next time the sign checks in during its three-hour cycle. Even with the display off, data will still be collected according to your settings.

For details about analyzing the data collected, see Generating Reports on page 41.

# Configuring speed settings

As shown below, in the **Equipment page > Speed** settings, you can set your sign's speed limit and scheduling, when it collects traffic data, speed ranges to display, when it should blink or strobe, along with radar sensitivity.



[Figure 13] Speed settings

Use the following table for details about speed settings:

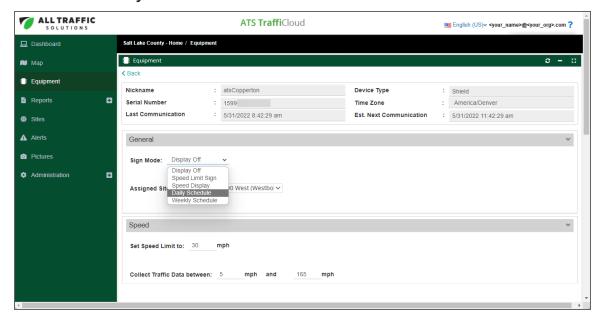
Setting	Description
Set Speed Limit to	Sets the speed limit for the sign. The speed limit is also set in the TraffiCloud <b>Site</b> tab and initially using the <b>Speed Limit</b> button on the sign itself. TraffiCloud settings take precedence over the settings on the physical sign.
Collect Traffic Data between	Sets the minimum and maximum speeds defining when traffic data is collected.
Display Speeds	Sets the range of speeds to be displayed. To avoid joy riders competing for "high scores" on radar signs, most organizations set the maximum display speed much lower than the data collection maximum speed.
Blink Above	Sets the speed when the display starts to blink. Most organizations set this at the speed limit of five to 10 mph over, depending on the situation. Uncheck to disable this setting if preferred.
Activate Strobe Above	Sets the speed when the strobe light in the sign (if equipped) starts to flash. Organizations that use the strobe option, typically set it to 10-15 mph above the speed limit. Uncheck to disable this setting if preferred.

Setting	Description	
Radar Sensitivity	Sets the sensitivity level of the radar device in the sign, ranging from least to most sensitive. We recommend using settings between 4 and 8.	
	Note: Setting radar sensitivity to less than 4 can result in unreliable detection distances, such as the vehicle being past the sign before it illuminates, while settings above 8 can cause the radar to pick up background objects, cross streets, or other interference.	

# Setting up speed schedules

#### To set up a daily or weekly schedule:

1. On the **Equipment** page for your sign, under **General**, select **Sign Mode** and select either **Daily Schedule** or **Weekly Schedule**.



[Figure 14] Selecting a scheduling mode

2. Scroll to the **Schedule** section, which appears after the **Speed**section.

For detailed steps, see:

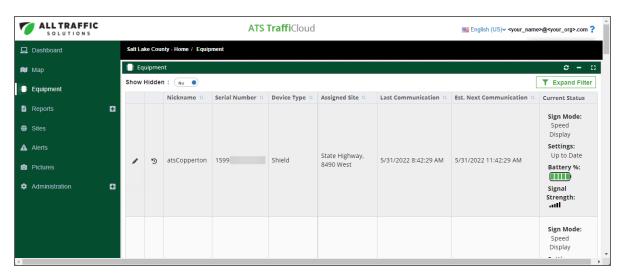
- Setting up a daily schedule below
- Setting up a weekly schedule on page 30

# Setting up a daily schedule

Set your **Sign Mode** to **Daily Schedule** if you want to use the same speed reduction every day and don't want to vary or repeat it based on the days of the week.

#### To set up a daily schedule:

1. On the navigation menu, click the **Equipment** tab and then click the Pencil icon next to the sign you want to assign the Site to. The **Equipment** details page opens.



[Figure 15] The Pencil icon



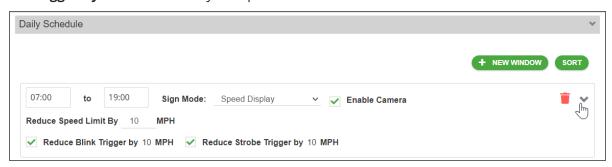
TIP: If you need to filter the list, click **Expand Filter**. You can filter by nickname, serial number, device type, Site, last communication, and power level.

Select Sign Mode > Daily Schedule (as shown in [Figure 14] on the previous page).
 Trafficloud adds a Daily Schedule section to your Equipment page, below the Speed section, like this:



[Figure 16] Daily Schedule (collapsed view)

- 3. Click the right chevron > at the side of the page or any blank area in the bounding box, and select schedule options. In the following example, the schedule and settings are:
  - Schedule is set from 07:00 to 19:00,
  - Sign Mode is set to Speed Display,
  - the camera is enabled, and
  - the options for **Reduce Speed Limit By**, **Reduce Blink Trigger By** and **Reduce Strobe Trigger by** are all reduced by 10 mph.



[Figure 17] Daily Schedule (expanded view)

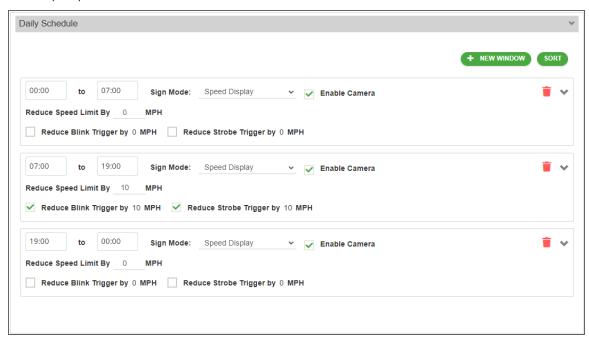
4. Use this table for details about the datafill options:

Setting	What you can do
Time frame	Set the time frames for and speed reduction.
Sign mode	Set the <b>Sign Mode</b> you want to use (typically <b>Speed Display</b> or <b>Display Off</b> ) for the scheduled time.
Enable Camera	Click the checkbox if you want the camera enabled when the radar detects a violation. For details about how to ensure that your sign captures photos when you want it to, see <i>Configuring Alerts and Images</i> on page 35.
Enable Aux Output	Enables an optional relay (switch) to allow control of a customer-provided external device, based on radar speeds (for example, a camera, light, or siren).
Reduce Speed Limit By	Enter the amount you want to reduce the speed limit by during scheduled hours. For example, if the regular speed limit is 35 mph and you want to reduce it to 20 mph, enter 15. The sign will use 20 mph as the speed limit during scheduled hours.
Reduce Blink Trigger By	First, click the checkbox if you want to set a <b>Blink Trigger</b> , the reduced speed when the sign will start to blink, and then enter the amount of the speed reduction from the normal speed for the sign.
Reduce Strobe Trigger By	Click the checkbox if you want to set a <b>Strobe Trigger</b> , the reduced speed when the strobe light in the sign (if equipped) will start to flash, and enter the amount of the speed reduction from the normal speed for the sign.

5. Click the **+ New Window** button to add scheduling windows until all 24 hours of the day are covered. TraffiCloud automatically adds another period of the day that hasn't been covered yet. You can create up to 13 scheduling windows per day.

Here's an example 24-hour schedule, including:

- no speed reduction for the first and last of the three periods of the day,
- the Sign Mode set to Speed Display, and
- a 10-mph speed reduction from 07:00 to 19:00.



[Figure 18] Daily Schedule - 24 hours

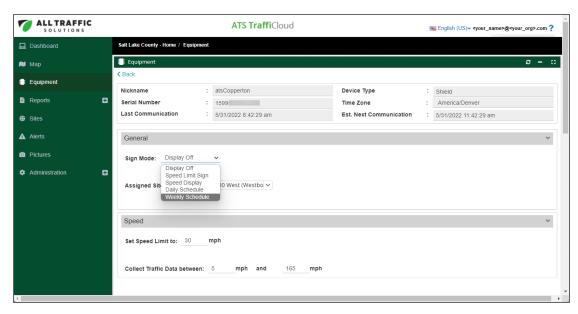


TIP: You can use the **Sort** button to sort multiple schedules from morning to night, or the trash icon it to delete a scheduling window.

6. Click the **Save All Equipment Settings** button to apply your changes.

#### Setting up a weekly schedule

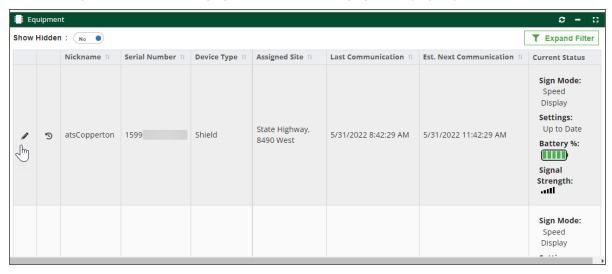
Setting a weekly schedule is more appropriate than a daily schedule for school or construction zones, where the speed reduction would usually be necessary only on workdays and during working hours.



[Figure 19] Sign Mode > Weekly Schedule

#### To set up a weekly schedule:

1. On the navigation menu, click **Equipment**. The main **Equipment** page opens.



[Figure 20] The Pencil icon



TIP: If you need to filter the list, click **Expand Filter**. You can filter by nickname, serial number, device type, Site, last communication, and power level.

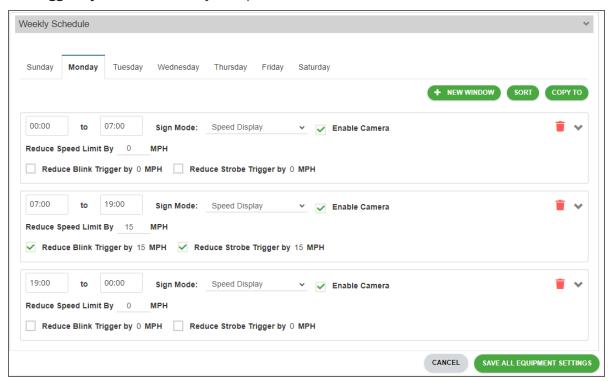
- Click the Pencil icon 

   in the row for the sign you want to set the schedule for. The Equipment details page opens.
- 3. Select **Sign Mode > Weekly Schedule** (as shown in [Figure 19] above).

### TraffiCloud adds a Weekly Schedule section to your Equipment page, like this:



- 4. Click the right chevron > at the side of the page or any blank area in the bounding box, and select scheduling options. In the following example, the schedule and settings are:
  - **Schedule** is set on Mondays to:
    - from 00:00 to 07:00 no speed reduction,
    - from 07:00 to 19:00, a speed reduction of 15 MPH,
    - from 19:00 to 00:00, no speed reduction.
  - Sign Mode is set to Speed Display,
  - the camera is enabled, and
  - the options for Reduce Speed Limit By, Reduce Blink Trigger By and Reduce Strobe
     Trigger by are all reduced by 15 mph.



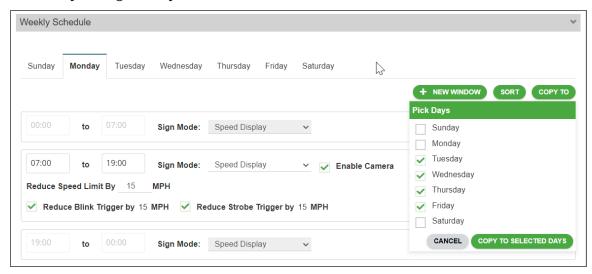
[Figure 21] Weekly Schedule (expanded view)

5. Use this table for details about the datafill options:

Setting	What you can do
Time frame	Set the time frames for and speed reduction.
Sign mode	Set the <b>Sign Mode</b> you want to use (typically <b>Speed Display</b> or <b>Display Off</b> ) for the scheduled time.
Enable Camera	Click the checkbox if you want the camera enabled when the radar detects a violation. For details about how to ensure that your sign captures photos when you want it to, see <i>Configuring Alerts and Images</i> on page 35.
Enable Aux Output	Enables an optional relay (switch) to allow control of a customer-provided external device, based on radar speeds (for example, a camera, light, or siren).
Reduce Speed Limit By	Enter the amount you want to reduce the speed limit by during scheduled hours. For example, if the regular speed limit is 35 mph and you want to reduce it to 20 mph, enter 15. The sign will use 20 mph as the speed limit during scheduled hours.
Reduce Blink Trigger By	First, click the checkbox if you want to set a <b>Blink Trigger</b> , the reduced speed when the sign will start to blink, and then enter the amount of the speed reduction from the normal speed for the sign.
Reduce Strobe Trigger By	Click the checkbox if you want to set a <b>Strobe Trigger</b> , the reduced speed when the strobe light in the sign (if equipped) will start to flash, and enter the amount of the speed reduction from the normal speed for the sign.

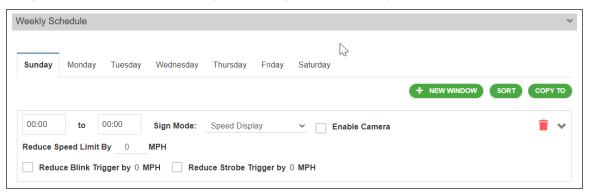
- 6. Click the **+ New Window** button to add scheduling windows until all 24 hours of the day are covered. Trafficloud automatically adds another period of the day that hasn't been covered yet. You can create up to 13 scheduling windows per day.
- 7. If you have a standard daily schedule you want to copy to the other days, such as Monday to Friday,
  - A. Click Copy To,
  - B. Select the other days you want to copy to,

c. Click **Copy to Selected Days**, as shown, copying the schedule from **Monday** over to **Tuesday** through **Friday**:



[Figure 22] Weekly Schedule > Copy to other days

8. For any days you don't want to apply a speed limit reduction, set the timespan from midnight to midnight (00:00 to 00:00), and the speed settings to 0, for example:



[Figure 23] Weekly Schedule > No speed reduction

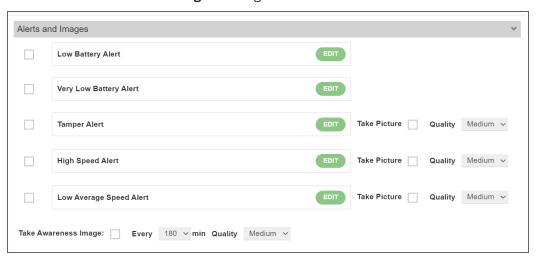
9. Click the **Save All Equipment Settings** button to apply your changes.

# **Configuring Alerts and Images**

In the **Equipment > Alerts and Images** settings you can set up alerts for your sign's battery charge level, tampering, as well as high and low speeds. You can also configure your sign to take pictures automatically, based on **Tampering**, **High Speed**, or **Low Speed** (congestion) events, and to take **Awareness Images**, photos of the roadway at set intervals. Traffic data are sent by the sign every three hours, but alerts are sent immediately.

#### To configure Alerts and Images:

- 1. On the navigation menu, click **Equipment**. The main **Equipment** page opens.
- 2. Click the Pencil icon next to the sign you want to assign the Site to. The **Equipment** details page opens.
- 3. Scroll down to the Alerts and Images settings.



[Figure 24] Alerts and Images

4. Use this table for details about configuring **Alerts and Images**:

Setting	How to set it	
Low Battery	To set low battery alerts:	
Alert	<ol> <li>Click the checkbox on the left side of the page to enable low battery alerts.</li> <li>Click the <b>Edit</b> button to open the <b>Edit</b> window, where you can set up</li> </ol>	
	<ul> <li>text and email alerts for TraffiCloud users and guest users. To enable alerts, move the slider to "Yes",</li> </ul>	
	<b>NOTE:</b> To enable text alerts, the <b>Allow Text Messages</b> slider must be set to <b>Yes</b> , and the user added in the <b>Administration &gt; Users</b> tab. See <i>Adding a user</i> on page 82.	
	<ul> <li>the charge level (threshold %) for when you want to receive battery alerts.</li> <li>We recommend the low battery alert threshold be set at 50% in freezing temperatures and 30% in seasonable weather.</li> </ul>	

Setting	How to set it
	a timespan for auto-silencing alerts.
	See Editing alerts on the facing page.
	3. Click the <b>Save Alert</b> button to save your changes.
Very Low Battery Alert	See <b>Low Battery Alert</b> , above. We recommend the <b>Very Low Battery Alert</b> threshold be set at 30% in freezing temperatures and 10% in seasonable weather.
Tamper	To set tamper alerts and speed alerts:
Alert	<ol> <li>Click the checkbox on the left side of the page to enable alerts.</li> <li>Click the <b>Edit</b> button to open the <b>Edit</b> window, where you can set up</li> </ol>
	<ul> <li>text and email alerts for TraffiCloud users and guest users. To enable alerts, move the slider to Yes,</li> </ul>
	Note: To enable text alerts, the <b>Allow Text Messages</b> slider must be set to <b>Yes</b> , and the user's mobile phone number
High Speed Alert	added in the <b>Administration &gt; Users</b> tab. See <i>Adding a user</i> on page 82.
	<ul> <li>for speed alerts, set a speed threshold (in mph or kph, depending on your account settings).</li> <li>a timespan for auto-silencing alerts. Silenced alerts temporarily suspend notifications, but do not stop recording of events and transmission to TraffiCloud. For <b>Tampering</b>, we recommend no auto-</li> </ul>
Low Average	silencing. Set auto-silencing to 0.  See <i>Editing alerts</i> on the facing page.
Speed Alert	3. Click the <b>Save Alert</b> button to save your changes.
	<ol> <li>Optionally, click the Take Picture checkbox and set the image quality (Low, Medium or High) to have a picture taken when an event is detected.</li> <li>If you select Send Alert and Take Picture, the alert email will include an attached image.</li> </ol>
	Note: The cameras miss vehicles occasionally and image quality is not yet advanced enough to capture license plates.
Take Awareness Image	Awareness Images are photos triggered at set intervals, independent of a specific event.
	<ol> <li>Click the checkbox to enable the sign to take a picture at set intervals.</li> <li>Beside Every, click the down arrow and select a time interval from the list. The range is from 15 to 240 minutes, at 15-minute intervals.</li> <li>For the Quality setting, you can select Low, Medium, or High for the picture.</li> </ol>

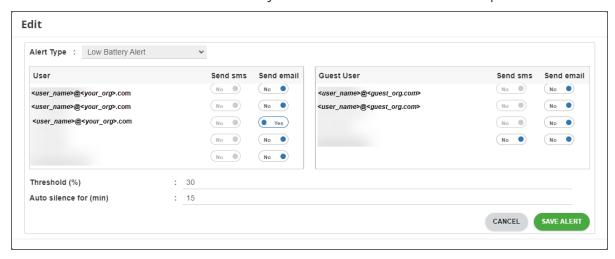
5. Click the **Save All Equipment Settings** button.

### **Editing alerts**

Use this topic for details about setting up notifications for alerts. To enable text messaging from TraffiCloud, your user account must include your cell number.

#### To edit an alert:

- 1. Open the **Equipment** page, and scroll down to **Alerts and Images**.
- 2. Click the **Edit** button next to the alert you want to edit. The **Edit** window opens.



[Figure 25] The Edit alerts window

3. Use this table for help with editing alerts:

Setting	What you can do			
Alert Type	Select the Alert Type you want to edit.			
User and Guest	Enable SM	S (text messages) or email (or both) to be sent to selected users.		
User	Send sms	Move the slider to <b>Yes</b> to enable, and <b>No</b> to disable sending text message alerts.		
	Send email	Move the slider to $\mathbf{Yes}$ to enable, and $\mathbf{No}$ to disable sending email alerts.		
		members of the organization granted access to the TraffiCloud account.  rs are users granted read only access to the TraffiCloud account.		
Threshold (%)	The battery charge level, or speed when you want to receive alerts.			
Auto silence for (min)	Enter a timespan in minutes for how long to prevent alerts from being sent after an incident.			

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# Setting a new Nickname for your sign

Use this topic to revise the original **Nickname** given to your sign. By default, TraffiCloud sorts the **Equipment** list by Nickname. For the new Nickname, enter a name that displays your sign in a useful alphanumeric sequence in the list.



TIP: If you need to filter the list, click **Expand Filter**. You can filter by Nickname, serial number, device type, Site, last communication, and power level.

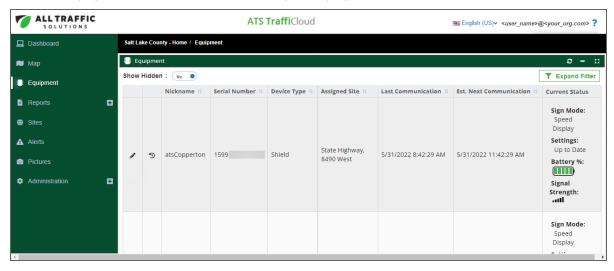
You can also sort the list from first to last by clicking the **Sort** buttons II beside **Nickname** and other column headings.



[Figure 26] The Equipment page > Sort buttons

#### To set up a Nickname:

1. Click the **Equipment** tab. Your subscribed signs display in the list.



[Figure 27] The Equipment table

Click the Pencil icon for the sign you want to change. The Equipment details page opens.



[Figure 28] The Nickname field

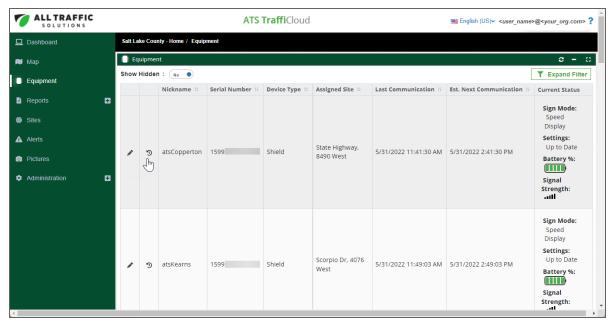
- 3. In the **Nickname** field, enter a new name or revise the existing name. The name must begin with "ats" (upper or lower case) and is limited to 14 characters or less.
- 4. Click the Save All Equipment Settings button.

# Retroactively adding a Site to a sign

Use the steps in this procedure to retroactively add a Site to a sign if you happen to have placed it on location before assigning a Site to it in TraffiCloud. As long as you turned your sign on and set a speed limit before installing it, the last 30 days of traffic data will be ready for upload to TraffiCloud as soon as you assign a Site to it.

### To retroactively add a Site to a sign:

1. Click the **History** icon **9** next to the Site name in the **Sites** list.



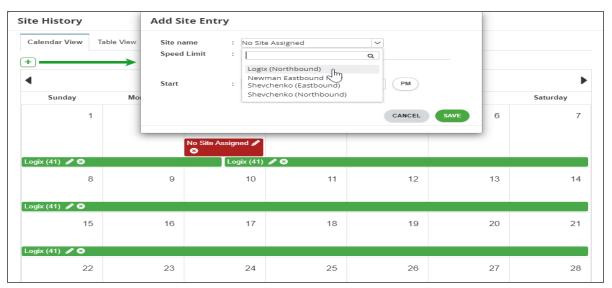
[Figure 29] The History icon

The **Site History** window opens, showing the **Calendar View**. If you prefer, you can change to the **Table View** to view the Sites without a calendar.

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2. In the **Site History** window, click the **Plus** icon • The **Add Site Entry** window opens, as shown in [Figure 30] below.

Dates where the sign was deployed are shown with a header bar in the calendar. You can scroll the calendar back to the desired date and click the **Pencil** icon to select that date.



[Figure 30] The Add Site Entry window > Calendar View

- 3. Click the **Site name** box as shown above, and select your Site from the drop-down list. The **Speed Limit** field populates automatically from your existing settings, as shown in the next step.
- 4. Select a start date and time from when your sign began collecting data.



[Figure 31] Setting a start date and time

- 5. Click **Save** in the **Add Site Entry** window.
- 6. Click **Save** in the **Site History** window to complete your changes.

# Chapter 5

# **Generating Reports**

TraffiCloud **Reports** feature a variety of preset reports you can easily run based on data gathered by Web-enabled radar signs. With TraffiCloud reports at your fingertips, you can quickly understand the driving patterns and issues on a given street, intersection, or your community as a whole.

ATS data-enabled radar display signs collect report-ready data as vehicles pass by during a given time period and automatically upload it remotely and securely to TraffiCloud, so that you don't have to send someone to the sign location to perform a manual download. The **Reports** feature analyzes and presents the data in a variety of useful ways to help with traffic planning and enforcement.

Every Trafficloud **Reports** page includes a place to select the Site you want reporting on, a calendar to select the date range, options for report selection and configuration, and for setting up and managing report subscriptions. See *Report configuration details* on page 44.

#### Topics in this chapter:

Report configuration details	. 44
Compliance & Risk reports	. 46
Enforcement Priorities reports	48
Subscribing to Reports	50
Managing report subscriptions	53
Printing reports	56

TraffiCloud subscribers have access to Premium Reports, and all ATS device owners have access to Standard Reports. Here's a quick summary of the seven reports you can generate:

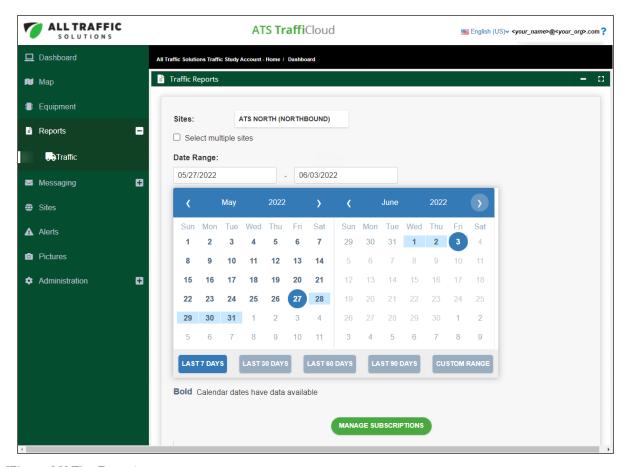
	Premium Reports		Standard Reports
Compliance & Risk	Identifies the volume of compliant drivers vs. low, medium, and high risk drivers.	Volume by Time	Provides traffic counts by hour and date.
Speed Effectiveness	Measures the effectiveness of signs in voluntary speed reduction, comparing speed at first detection by the sign to when the vehicle passes the sign.	Volume by Speed	Displays vehicles counted in 5-mph increments.
Extended Speed Summary	Provides a concise summary of speeds at a given Site.	Raw Data Export	Generates data for all traffic by date, including speed measurements (maximum, minimum, mean, 85%, median, and pace speed).
Enforcement Priorities	Analyzes and compares traffic data, listing time periods at Sites with the worst violation numbers.		

The most important reports as you get started analyzing your traffic data are the **Compliance & Risk** reports and the **Enforcement Priorities** reports.

You can also set up a **Traffic Volume** widget in the **Dashboard**. See *Setting up a Traffic Volume Dashboard widget* on page 77.

#### To generate reports:

- 1. On the navigation menu, click **Reports**. The **Traffic Reports** page opens.
- 2. Click in the **Sites** box and select your Site from the drop-down. You can filter the list by typing Site names and then selecting your Site.
- 3. Select the dates for your report. See Report configuration details on page 44.
- 4. Click the Select Report drop-down, and select a report type. See The Reports page on the facing page for an example of what you'll see with a Compliance & Risk report selected, which includes Violation Threshold, set to the default of 10 mph above the speed limit, and High Threshold, set to the default of 20 mph above the speed limit.



[Figure 32] The Reports page

**5**. Click the **Generate** button to create a report for the selected date range. Your report displays below the configuration section.

For details and examples, see

- » Compliance & Risk reports on page 46
- » Enforcement Priorities reports on page 48

# Report configuration details

The following table provides details about the **Reports** page fields and how to use them:

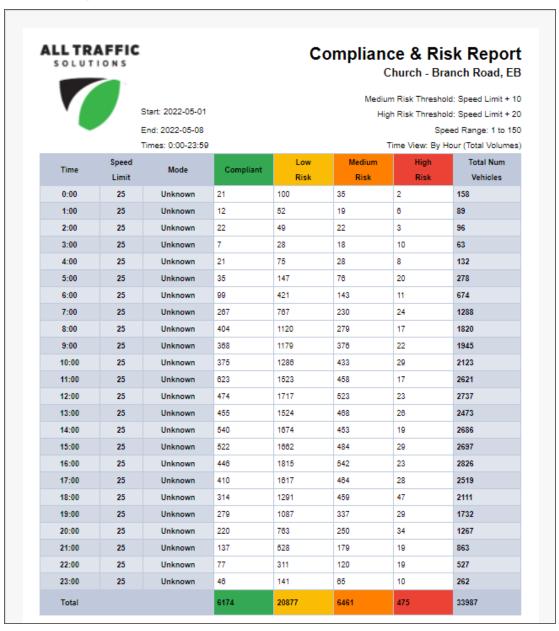
Setting	What you can do
Sites	Select a Site from your list. A report must have a Site assigned before you can generate it. See <i>Assigning a Site to your sign</i> on page 20.
Select multiple sites	Click the checkbox to enable reporting about multiple Sites. Only the <b>Enforcement Priorities</b> report is optimized for multiple Sites.
Date Range	Reports also require a date range. You can use the buttons for the last seven, 30, 60, or 90 days, or even enter dates manually, using the format MM/DD/YYYY.
	To select from the calendar:
	1. Click the <b>Custom Range</b> button.
	2. Click the start date.
	<ul><li>3. Move the mouse pointer to the end date.</li><li>4. Click the end date.</li></ul>
	<b>Note:</b> To view premium reports, you must select dates when your TraffiCloud subscription has been active.
Report Configura	ation
Report Type	Use the default <b>Standard</b> report type. If you also have a StatTrak or Speedlane device, you can use the <b>Count and Classify</b> report.
Select Report	Select one of the available report types.
Ranking	<ul> <li>For Enforcement Priorities reports, you can choose between</li> <li>85% Speed: Ranks the results based on the maximum speed that 85% of drivers will not exceed on a given road, even if there were no speed limits, stop signs, or traffic signals. This is the default selection.</li> <li>Speed and Volume: Ranks the results based on speed or volume of vehicles, or an average of both. You can move the slider from 0 to 100%. The default setting is 50%.</li> </ul>
Bin Size	For <b>Volume by Speed</b> reports, sets the bin size for each increment in speed, measured in mph. The options are either 5 mph or 10 mph.
Time Interval	Select the time interval for the report. For <b>Compliance and Risk</b> reports, you can choose by hour, half-hour, 15-minute intervals, or by day of the week, date, or week. The available options vary by report. <b>Total Volumes</b> You can choose between <b>Total Volume</b> , which is the total number of vehicles
	passing the sign during a given interval, and <b>Total Average</b> , which shows the average number of vehicles during a given interval.

Setting	What you can do
Violation Threshold	Sets the speed in mph that will be considered a violation. The default is 10 mph above the speed limit, but you can change it before you generate the report (Premium feature).
High Threshold	Sets the speed in mph that will be defined as high risk. The default is 20 mph above the speed limit, but you can change it before you generate the report (Premium feature).
Minimum Hourly Vehicles	For <b>Enforcement Priorities</b> reports, sets the minimum number of vehicles to be detected per hour before a report is generated (Premium feature).
Data Filters	
Time of Day	Sets the time span during a given day for the report, with the default being 0:00 to 23:59.
Days of Week	Sets the days of the week for the report to gather data.
Speed	Sets the speed range the report should include.
Subscriptions	
Manage Subscriptions	Opens the <b>Manage Subscriptions</b> window, where you can adjust existing subscription settings.
Subscribe	Opens the <b>Subscribe</b> window, where you can create recurring automatic report generation. Give the report a name, select subscribers from other users on the TraffiCloud account, file type, and time of day and frequency of the report, which can be any or all of the days of the week or month.
Generating repo	rts
Generate	Generates the report – scroll down on the <b>Reports</b> page to view it. For details and examples, see
	<ul> <li>Compliance &amp; Risk reports on the next page</li> <li>Enforcement Priorities reports on page 48</li> </ul>

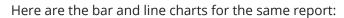
# Compliance & Risk reports

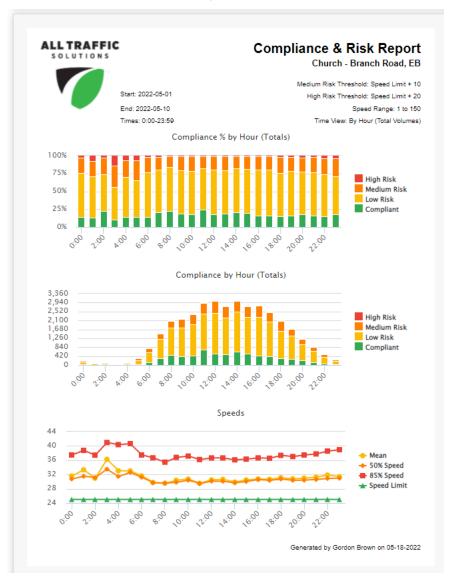
**Compliance & Risk** reports are one the two most useful reports to law enforcement authorities, along with Enforcement Priorities. Compliance & Risk reports identify the volume of compliant drivers vs. low, medium, and high risk drivers, displaying the results in two pages: in a table and in bar and line graphs.

Here's an example of the first page of the report, which provides a table averaging the results by the hour for a 24-hour period for the dates selected:



[Figure 33] Compliance & Risk report table



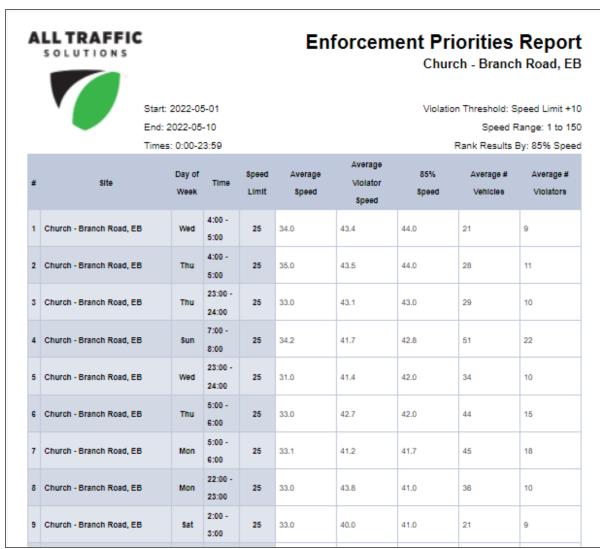


[Figure 34] Compliance & Risk reports charts

# **Enforcement Priorities reports**

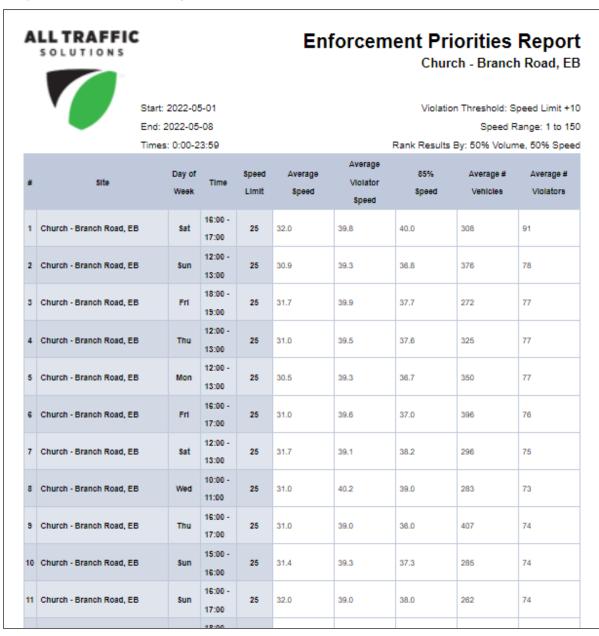
The **Enforcement Priorities** report is one the two most useful reports to law enforcement authorities, along with Compliance & Risk reports. The Enforcement Priorities report analyzes and compares traffic data, listing time periods at Sites with the worst violation numbers.

Here's an example of the **Enforcement Priorities > 85% Speed** report, which ranks the results based on the vehicles with the 85th percentile speed (the speed that 85% of vehicles will not exceed) for the dates selected:



[Figure 35] Enforcement Priorities > 85% Speed

And here is an example of the **Enforcement Priorities > Volume and Speed** report, set to 50%, which ranks the results based on a combination of the average number of vehicles (**Volume**) and the average number of violators (**Speed**).

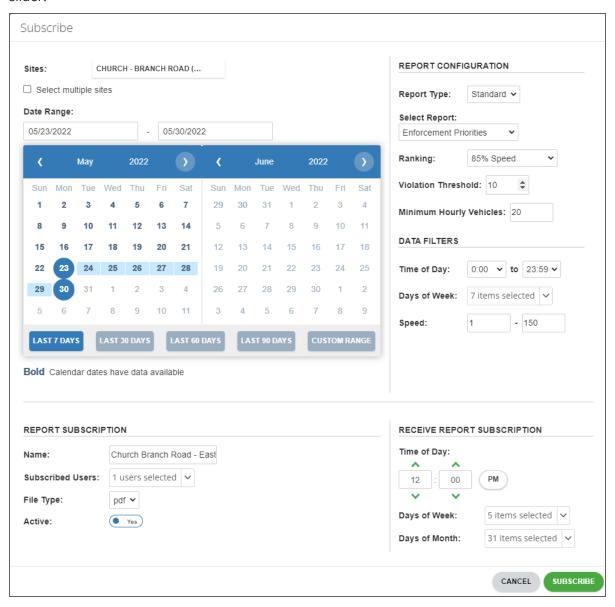


[Figure 36] Enforcement Priorities > Volume and Speed

# Subscribing to Reports

Once you have configured a report for a given Site, you can schedule TraffiCloud to send it to you or any other subscriber on the same TraffiCloud account via email.

You can also configure the report name, file format (pdf or csv), the time of day, days of the week, and even the dates when the report is sent out, or suspend a report subscription using the **Active** slider.



[Figure 37] Reports > Subscribe window

#### To subscribe to reports:

- 1. On the navigation menu, click **Reports > Traffic**, and follow the steps in *Generating Reports* on page 41. Your report displays below the configuration section.
- 2. Once you have generated your report, click the **Subscribe** button.



[Figure 38] The Subscribe button

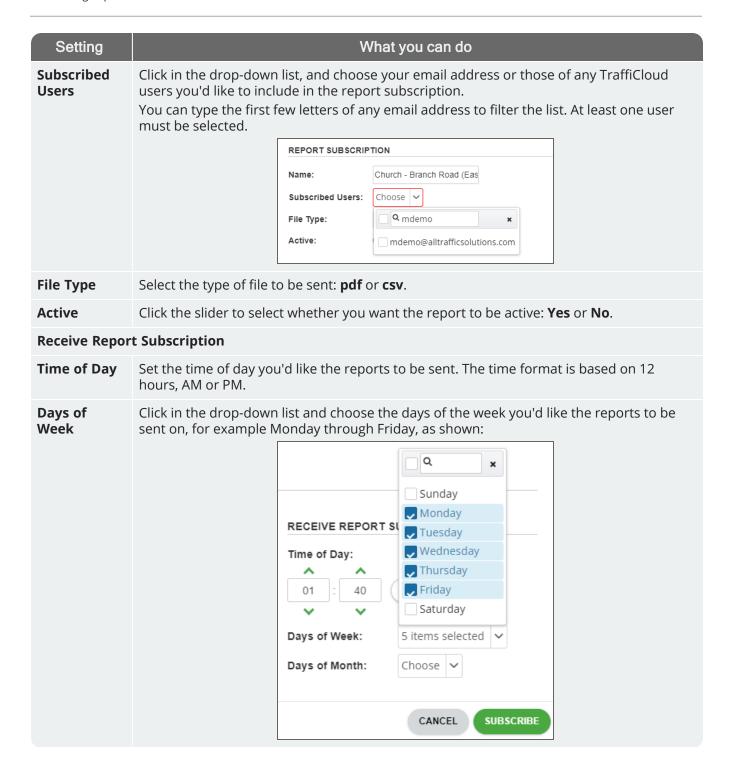
The **Subscribe** window opens, with the **Report Subscription** and **Receive Report Subscription** sections across the bottom.

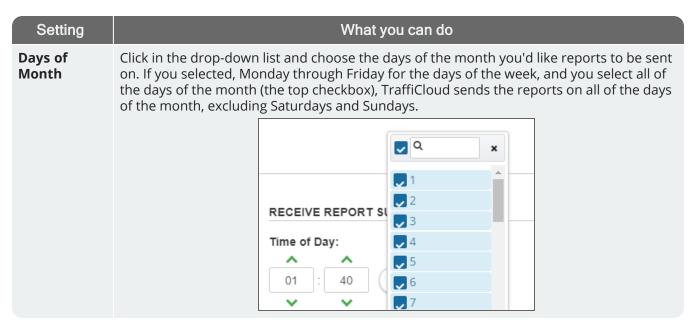


[Figure 39] Report Subscription settings

3. Use the following table for help with your selections:

Setting	What you can do				
Report Subscri	iption				
Name	Type a representative name for the report. Using the Site name and an abbreviation of the report type is useful, such as "Church Branch Road - Eastbound - C&R" (for Compliance and Risk). TraffiCloud displays the report subscription name in the subject line of the email it sends you.				





4. After you have completed your selections, click the **Subscribe** button.

# Managing report subscriptions

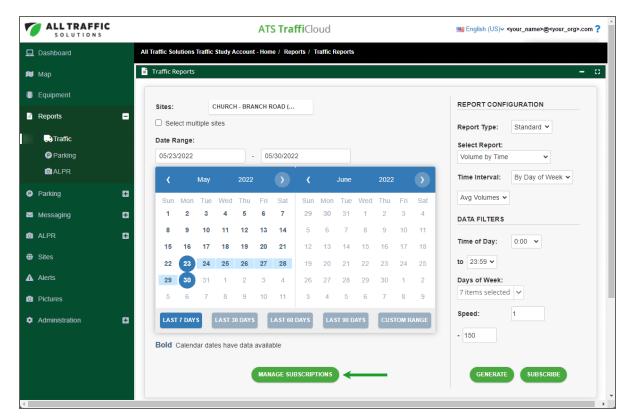
Use this procedure for help with managing report subscriptions.



[Figure 40] Report Subscription settings

#### To manage report subscriptions:

- 1. On the navigation menu, click **Reports > Traffic**.
- 2. Click the **Sites** box, and select the Site you want to manage report subscriptions for.
- 3. Click the **Manage Subscriptions** button at the bottom of the page, as shown in *The Traffic Reports page > Manage Subscriptions button* on the next page.



[Figure 41] The Traffic Reports page > Manage Subscriptions button

#### The **Manage Subscription** window opens.



[Figure 42] The Manage Subscription window

- 4. Do any of the following:
  - A. If the list is long, you can filter by **Name**, **Status**, or **Subscribed**, or by typing characters from the report name in the **Search** box.
  - **B.** Click the **Subscribed** slider next to a subscription to change it from **Yes** (subscribed) to **No** (unsubscribed).
  - c. Click the **View** icon next to a Site with the report subscription you want to update. The **Subscribe** window opens, showing the **Report Subscription** section at the bottom left of the page. See *Report Subscription settings* on the previous page.

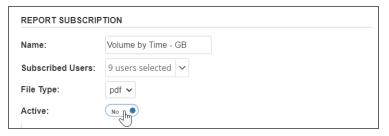
- **5**. Do either of the following:
  - A. In the drop-down list, click to select or deselect your email address or those of any TraffiCloud users you'd like to subscribe or unsubscribe from the report subscription.

You can type the first few letters of any email address to filter the list. At least one user must be selected to save a report subscription.



[Figure 43] The Subscribed Users list

B. With at least one user selected in the Subscribed User list, click the Active slider. Set it to Yes to activate the report subscription or No to deactivate it. Note that deactivating the subscription will apply to all report subscribers.



[Figure 44] The Report Subscriptions Active/Inactive slider

**6**. After you have completed your selections, click the **Update** button. The changes will be updated for the Site at the next communication window.

# **Printing reports**

Use this procedure for help with printing reports from TraffiCloud.

#### To print reports:

- 1. Generate a report. See *Generating Reports* on page 41.
- 2. Scroll to the bottom of the page and use the default file format for your report (**pdf**) or change it to **csv** as required.
- 3. Click the **Export** button. A copy of the report is generated in the format you selected in the previous step and placed in your **Downloads** folder.



[Figure 45] The Reports Export button

4. Open the file on your computer. You can view it there or send it to your printer.



TIP: If you subscribe to reports, you can also view or print them from your email client. See *Subscribing to Reports* on page 50.

# Chapter 6

# Using the Map page to view Sites

Use this chapter for help with the TraffiCloud **Map** page. TraffiCloud uses Google Maps to display status markers, which provide the location, status, and overview data of each of your Shield Radar Speed Signs.

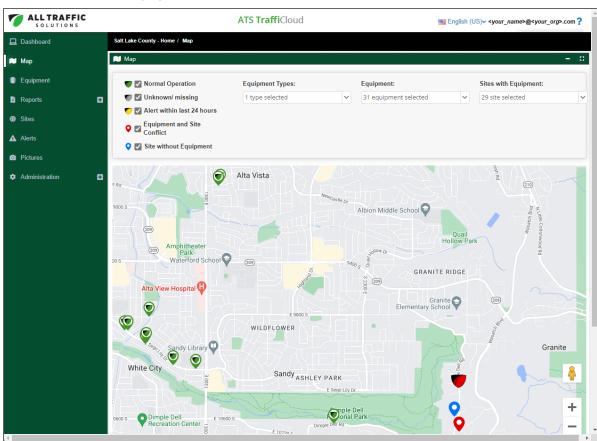
### Topics in this chapter:

Understanding the Map page	.58
Filtering the Map page	. 61
Resolving equipment and Site conflicts	. 62

# Understanding the Map page

Here's an example of what you'll see on the Map page, showing

- » most Sites with **Normal Operation** and at the assigned Site:  $\overline{\mathbb{Q}}$ ,
- » one Site with an Equipment and Site Conflict: ▼ and ♀.



[Figure 46] The Map page

## Map page status markers and popups

Use the table below for help with the **Map** page status markers and popups.

## To display the status popup for a Site:

» Hover the mouse over the status marker.

Status marker and popup	Name	Description
atsWhite City - 0118  Sign Mode: Speed Display Speed Limit: 25MPH Serial: 15990919011830  Average Speed: 25MPH 85% Speed: 30MPH Last Traffic Data: Data unavailable Battery %: Signal Strength:	Normal operation	The Site and equipment are operating normally. The green circle around the Normal Operation shield icon means that the sign is at the assigned Site.  The popup displays:  Sign Mode Speed Limit Serial number Average Speed  85% Speed Last Traffic Data Battery % Cellular modem signal strength
atsSandy Area Sign Mode: Speed Display Speed Limit: 25MPH Serial: 15991622010530 Average Speed: 39MPH 85% Speed: 49MPH Last Traffic Data: Data unavailable Battery %: Signal Strength:	Unknown/ Missing	The status of the equipment is unknown, and it may be powered off or otherwise not communicating. The popup displays:  Sign Mode Speed Limit Serial number Average Speed Battery Speed Last Traffic Data Battery % Signal Strength Create Site Here  You can use the Create Site Here button to create a Site at the location.

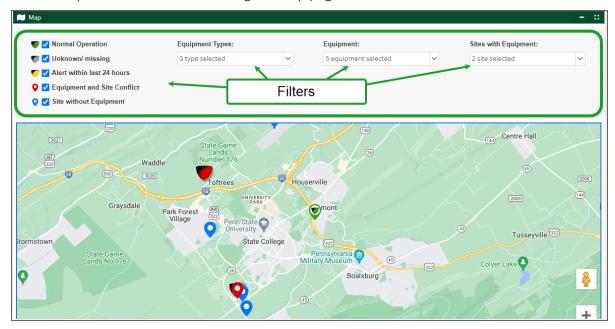
Status marker and popup	Name	Description
Dimple Dell Rd, 10370 South Latest 85% Speed: 34.0 MPH Latest Alert: Tamper alert Average Speed: 28.0 MPH Latest Traffic: Jun 3 2022 02:00PM Speed Limit: 25 MPH	Alert within last 24 hours	The Site has registered an alert within the past 24 hours. The popup displays:  • Latest 85% Speed • Latest Alert • Average Speed • Latest Traffic • Speed Limit
ats7F01 Sign Mode: Display Off Speed Limit: 35MPH Serial: 129925160197F01 Average Speed: Data unavailable 85% Speed: Data unavailable Last Traffic Data: Data unavailable Battery %: Data unavailable Signal Strength:  Create Site Here	Equipment and Site Conflict	Flags a mismatch between the GPS coordinates coming from the equipment and the location set up in the Site. For example, this can occur when you move a sign to a new location without reassigning the sign to that Site.  To resolve the conflict, hover the mouse pointer over the red shield status marker to display the popup, and then click the Create Site Here button. For details, see Resolving equipment and Site conflicts on page 62.  The popup displays:  Sign Mode Speed Limit Serial number Average Speed Battery % Signal Strength Create Site Here
Dimple Dell Rd, 10370 South Latest 85% Speed: 34.0 MPH Latest Alert: N/A Average Speed: 28.0 MPH Latest Traffic: Jun 3 2022 02:00PM Speed Limit: 25 MPH	Equipment and Site Conflict	Represents a Site that is assigned to the sign, as shown above, but the sign is not in the correct location.  To resolve the conflict, see the previous row in this table, or go to Resolving equipment and Site conflicts on page 62.  The popup displays:  Latest 85% Speed  Latest Alert  Average Speed  Latest Traffic  Speed Limit

Status marker and popup	Name	Description	
Dimple Dell Rd @ Deer Hollow Latest 85% Speed: null MPH Latest Alert: N/A Average Speed: null MPH Latest Traffic: N/A Speed Limit: 25 MPH	Site without Equipment	The Site has no equipment assigned to it, and the popup displays the following categories, with no data:  • Latest 85% Speed • Latest Alert • Average Speed • Latest Traffic • Speed Limit	

# Filtering the Map page

You can use filters to dynamically show or hide equipment on the **Map** page. As you select or deselect each filter type, the map updates automatically.

Use this topic for details about filtering the Map page.



[Figure 47] The Map page > Filters

#### To filter the Map page:

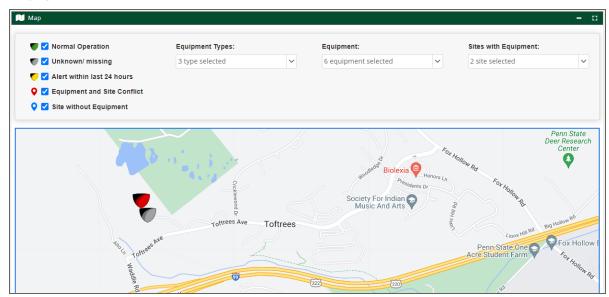
- 1. On the navigation menu, click the **Map** tab. The **Map** page opens.
- 2. Set the zoom level you prefer. Typically, you need to zoom until you can see street names. To zoom in,
  - » Do any of these: Roll the middle mouse button forward, use the + sign on the bottom right corner of the map, or click the keyboard + key. See the Keyboard Shortcuts at the bottom-right corner of the map as well.
  - » As you zoom, click and hold the mouse button on the map to drag and reposition your view of the blue dot or status marker.

3. Use the following table for details about using filters. As you select and deselect filters, you'll see the status markers appear and disappear on the map. By default, all filter types are selected.

Filter type	What you can do
Status Marker check boxes	<ul> <li>Select and deselect check boxes to show status markers by type. For details about status markers, see <i>Understanding the Map page</i> on page 58.</li> </ul>
Equipment Types	<ol> <li>Select and deselect check boxes to show specific types of equipment.</li> <li>Click the down arrow to select or search by equipment type.</li> </ol>
Equipment	<ol> <li>Select and deselect check boxes to show all (the default) or specific equipment available.</li> <li>Click the down arrow to select or search by specific equipment nickname.</li> </ol>
Sites with Equipment	<ol> <li>Select and deselect check boxes to show all Sites with equipment available.</li> <li>Click the down arrow to select or search by Sites with equipment.</li> </ol>

# Resolving equipment and Site conflicts

You can use the **Equipment and Site Conflict** status marker and popup to resolve Site conflicts, which are mismatches between the GPS coordinates coming from the equipment and the location you set up in TraffiCloud for the sign. For details about these markers, see *Equipment and Site Conflict* on page 60.



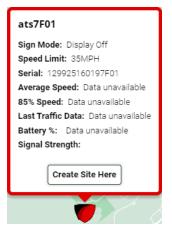
[Figure 48] The Map page > Equipment and Site Conflict

#### To resolve equipment and Site conflicts:

- 1. On the navigation menu, click the **Map** tab. The **Map** page opens.
- 2. Zoom the map view to the area of the conflict. To zoom in,
  - » Do any of these: Roll the middle mouse button forward, use the + sign on the bottom right corner of the map, or click the keyboard + key. See the Keyboard

**Shortcuts** at the bottom-right corner of the map as well.

- » As you zoom, click and hold the mouse button on the map to drag and reposition your view of the blue dot or status marker.
- 3. Locate the red shield icon and hover the mouse button over it. The popup displays:



[Figure 49] The Equipment and Site Conflict status marker and popup

- 4. Click the **Create Site Here** button. The **Add Site** window opens, showing the blue dot, representing the current location on the map. You can drag it as required. See also *Creating a Site* on page 15.
- **5**. Add a Site name, speed limit, description, and direction of travel and click the **Save Site** button.

Resolving	equipment	and	Site	conflicts
-----------	-----------	-----	------	-----------

# Chapter 7

# **Checking Alerts**

The TraffiCloud **Alerts** tab opens an archive of alerts, which are event notifications sent to TraffiCloud users for issues such as low battery, tampering, and high speed or low speed (congestion) events.

The **Alerts** page includes the following:

- » Drop-down filter lists, you can use to can filter the display by **Device**, **Site**, **Alert Type**, and **Date Range**.
- » A table, including
  - A **View** icon **1** next to each Alert in the table. Click to open the **View Alert** window, where you can view and print Alert details (see *Checking Alerts* above).
  - Details for Alerts by **Timestamp**, **Device**, **Site**, **Alert Type**, **Threshold**, and **Recipients**. See *Viewing Alerts* on the next page.

#### Topics in this chapter:

Viewing Alerts	66
The View Alert window	67
Filtering Alerts	68

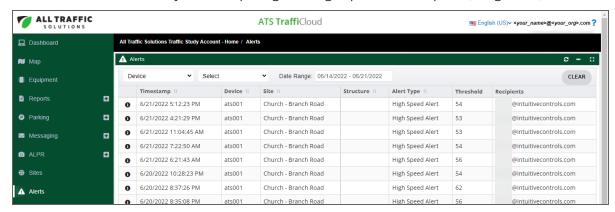
#### See also

- » Configuring Alerts and Images on page 35
- » Checking Pictures on page 71
- » Setting up an Alert History Dashboard widget on page 78

Checking Alerts p. 65

# Viewing Alerts

Use this topic for details about viewing **Alerts**, which are event notifications sent to TraffiCloud users for issues such as low battery, and tampering, and high speed or low speed (congestion) events.



[Figure 50] The Alerts page > Viewing Alerts

#### To view Alerts:

- 1. On the navigation menu, click the **Alerts** tab. The **Alerts** page opens.
- 2. The default date range displays alerts for the past week only. If no alerts are showing, try pressing the **Clear** button, as shown:



[Figure 51] The Alerts page > Clear button

3. Use the following table for help with the fields in the **Alerts** table:

Setting	Description
Filters	Use the filters to narrow the number of alerts that TraffiCloud displays. See <i>Filtering Alerts</i> on page 68.
View icon <b>1</b>	Opens the <b>View Alert</b> window.
Timestamp	The timestamp indicating when the <b>Alert</b> was sent.
Device	The device <b>Nickname</b> .
Site	The <b>Site</b> name representing the physical location of your sign.
Structure	The <b>Structure</b> column is only used in parking applications.
Alert Type	The alert type that was sent.

Setting	Description
Threshold	Shows the value for the low battery, tampering, or a speed event that triggered the alert. Thresholds are set in <b>Equipment &gt; Alerts and Images</b> . See <i>Configuring Alerts and Images</i> on page 35.
Recipients	The email address or cell numbers of the users the alert was sent to.



TIP: You can also set up an **Alert History** widget in the **Dashboard**. See *Setting up an Alert History Dashboard widget* on page 78.

### The View Alert window

Use this topic for details about the **View Alert** window.

#### To open the View Alert window:

- 1. On the navigation menu, click the **Alerts** tab. The **Alerts** page opens.
- 2. Click the **View** icon **1** next to an Alert in the table. The **View Alert** window opens. The example here includes a photo. Photos are enabled in **Equipment > Alerts and Images**. See *Configuring Alerts and Images* on page 35.



[Figure 52] The View Alert window

Setting	Description	
Timestamp	The timestamp when the <b>Alert</b> was sent.	
Device	The device <b>Nickname</b> .	
Site	The <b>Site</b> name representing the physical location of your sign.	

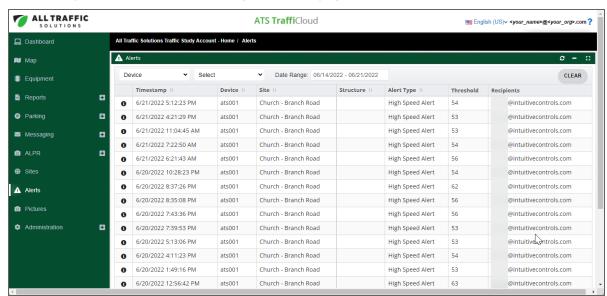
Checking Alerts p. 67

Setting	Description	
Structure	The <b>Structure</b> column is only used in parking applications.	
Alert Type	The alert type that was sent.	
Email Recipients	The email addresses of the users the alert was sent to.	
SMS Recipients	The cell phone numbers of the users the alert was sent to.	
SMS	The content of the text message (SMS) that was sent.	
Email	The content of the email message that was sent.	
Print	The <b>Print</b> button - click to print <b>Alert</b> details.	

# Filtering Alerts

You can use filters to dynamically show or hide alerts on the **Alerts** page. As you select or deselect each filter type, the map updates automatically.

Use this topic for details about filtering the **Alerts** page.

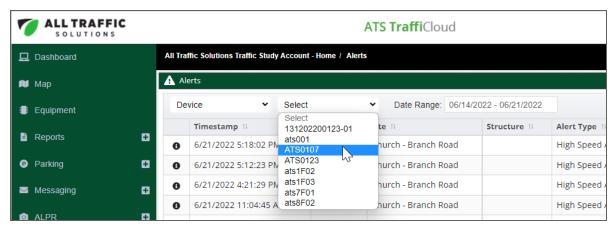


[Figure 53] The Alerts page > Filtering Alerts

#### To filter the Alerts page:

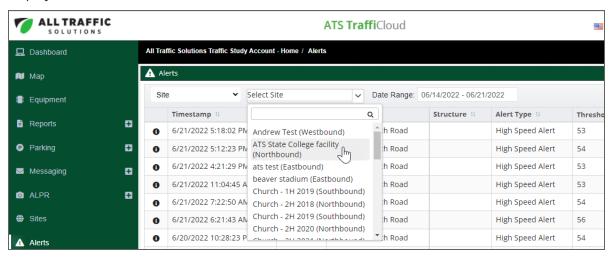
- 1. On the navigation menu, click the **Alerts** tab. The **Alerts** page opens.
- You can select from the following options in the first filter drop-down list: Device, Site and Alert Type. As you select and deselect filter options, related filters become available in the second drop-down list.

For example, if you use the default **Device** filter, the second drop-down displays the available devices, as shown:



[Figure 54] Alerts > Filtering by Device

In [Figure 55] below, the first filter is set to **Site**, resulting in the following Site list to filter the display further:

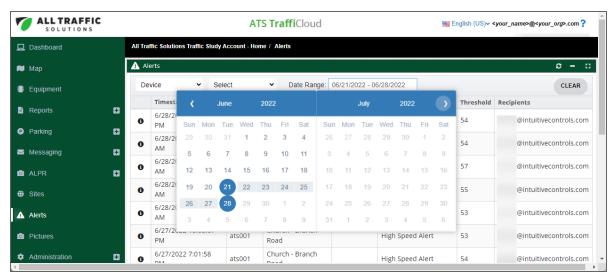


[Figure 55] Alerts > Filtering by Site

Checking Alerts p. 69

[Figure 56] below shows an example of filtering by date. To select a **Date Range** in the calendar, first click the start date, move the mouse pointer to the end date, and then click the end date.

Or, as mentioned earlier, you can click the **Clear** button to clear all dates so that all prior alerts are shown.



[Figure 56] Alerts > Filtering by Date Range

# Chapter 8

# **Checking Pictures**

Use this topic for help with checking photos available from the TraffiCloud **Pictures** tab. The **Pictures** page includes the following:

- » A table displaying existing photos by Timestamp, Image Type, Size, Device, Quality, Retention status, and Image thumbnails.
- » An **Edit** icon **1** next to each picture in the table that opens the **Preview** window, where you can manage pictures (see *Managing pictures* on page 73),
- » Drop-down lists, where you can filter the display by Site, Date Range, Image Type, and Device,

To configure your sign to take pictures, go to the **Equipment page** for your sign and scroll down to **Alerts and Images**. You can enable automatic picture-taking based on **Tampering**, **High Speed**, or **Low Speed** events, or take **Awareness Images**, photos triggered at set intervals, independent of a specific event. See *Configuring Alerts and Images* on page 35.

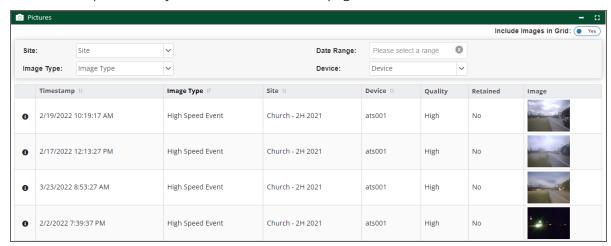
#### Topics in this chapter:

The Pictures page	 72
Managing pictures	 73

Checking Pictures p. 71

# The Pictures page

Here's an example of what you'll see on the **Pictures** page:



[Figure 57] The Pictures page

Use the following table for descriptions of how to use the page:

Setting	Name	How to use it
Thumbnails	lmages slider	To display thumbnails on the page, click the <b>Images slider</b> to change the setting from <b>No</b> to <b>Yes</b> .
Filters		Use the filters section to sort the photo display, which can be useful when you have a large number of pictures.
	Site	Filters the display to show pictures captured at specific Sites in the grid. By default, photos from all Sites display.  Click the down arrow to select or search by Site name.
	Date Range	Filters the display to show photos captured on specific dates. By default, the past week is selected. You can click the sicon to clear the dates and view all photos, or click on the existing dates to display a calendar popup. To select a date range in the calendar, first click the start date, move the mouse pointer to the end date, and then click the end date.
	Image Type	Filters the display to show pictures based on the kind of image taken:  • Awareness Image, • Congestion Event, • High Speed Event, • Tamper Event, and • User Triggered (photos captured using the SmartApps mobile app).  By default, photos from all Sites display. Click the down arrow to select or search by Image Type.

Setting	Name	How to use it
	Device	Filters the display to show all (the default) or specific devices available.  Click the down arrow to select or search by device type.
		, ,,
	Include Images in Grid	Enables you to display thumbnail images in the grid. By default, thumbnails are hidden. To display thumbnails, move the slider to <b>Yes</b> .
Pictures page table options and fields		This section provides details about the options and fields in the table on the <b>Pictures</b> page. Click the up/down arrows u where applicable, beside column headers to change the sort order.
	Edit button⊕	Opens the <b>Preview</b> window, where you can manage pictures (see <i>Managing pictures</i> below).
	Timestamp	Displays the date and time the picture was taken.
	Image Type	Displays the image type. See <b>Image Type</b> , above.
	Site	Displays the Site where the picture was taken. Pictures taken by signs with no Site assigned will have blank <b>Site</b> fields, on the <b>Pictures</b> page and in the <b>Preview</b> window.
	Device	Displays the device type used to take the picture.
	Quality	Displays the image quality: <b>Low</b> , <b>Medium</b> , or <b>High</b> .
	Retained	Displays the retention status of the picture, which can be <b>Yes</b> or <b>No</b> . The default status ( <b>No</b> ), purges the picture automatically after six months. To keep a picture indefinitely, click the <b>Edit</b> button and change the status to <b>Yes</b> .

## Managing pictures

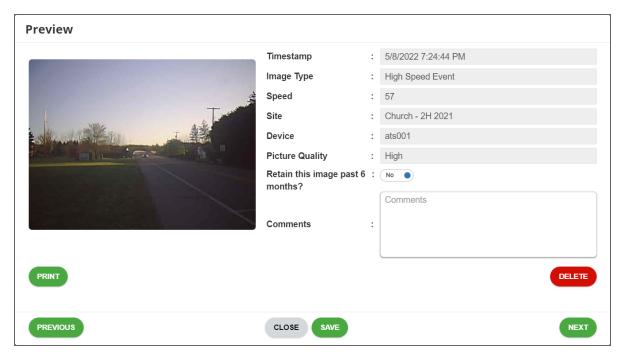
You can use the **Preview** window to do the following:

- » view or print pictures taken by your signs,
- » change the retention period,
- » add comments,
- » delete pictures,
- » view picture details,
- » navigate between pictures.

#### To manage your pictures in the Preview window:

1. In the grid view, click the **Edit** icon **1** to open the **Preview** window.

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[Figure 58] The Preview window

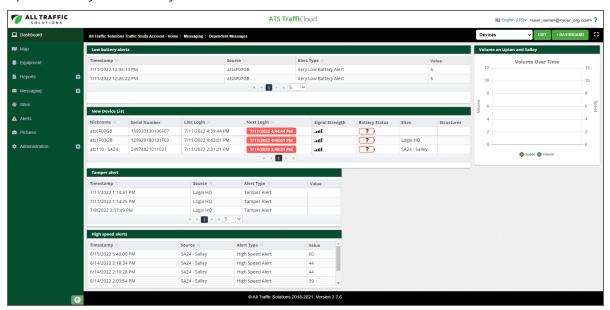
2. Use the following table for details about the interactive features of the **Preview** window:

Setting	What you can do
Retain this image past 6 months?	Move the slider to <b>Yes</b> to set the retention period for the picture to an indefinite period of time.
Comments	Enter any comments you want to record about the picture.
Print	Click to save a PDF with the photo and descriptive data. Your browser should display the PDF in a new tab or window, with options to print and download the picture.
Delete	Click to delete the picture. A prompt appears, asking you to confirm.
Save/Close	Click to save your changes or to close the window.
Next/Previous	Click to navigate between pictures on the <b>Pictures</b> page.

## Chapter 9

## Using the Dashboard

When your TraffiCloud account is first set up, you'll see a default Dashboard in the main viewing pane. Dashboards are meant to give you a quick overview of your All Traffic Solutions devices and activity, and are made up of components called "widgets", which add features to websites. The example below shows the subscribed devices and alert history in a widget named "Traffic". You can add widgets to Dashboards, add multiple Dashboards, and specify a default Dashboard. Here's an example of what you'll see on your Dashboard:



[Figure 59] The Dashboard page > Alerts History, Device List, and Traffic Volume widgets

Topics in this chapter:

Using the Dashboard p. 75

Setting up a Traffic Volume Dashboard widget	77
Setting up an Alert History Dashboard widget	78
Setting up a Device List Dashboard widget	79

## Adding widgets to your Dashboard

Use this procedure to add widgets to your Dashboard.

You can create three types of Dashboard widgets:

Widget type	Description
Traffic Volume Over Time	Provides a graphic display of the volume of traffic over a given time period.
Alert History	Displays alerts for high speed, device tampering, and low battery alerts. We recommend creating a separate widget for each.
Device List	Displays a list of devices. You can configure the display for your devices, electrical power status, cellular signal strength, assigned Site, how often the data should be updated, and number of rows in the display table.

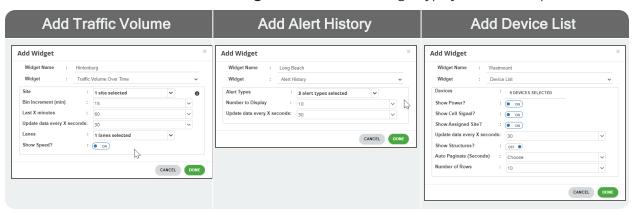
#### To add a widget to your Dashboard:

- 1. On the navigation menu, click the **Dashboard** tab. The Dashboard page opens, showing any Dashboards that have been created on your account.
- 2. Click the **Edit** button just below the TraffiCloud title bar. The Dashboard editing buttons display.
- 3. Click the **+Widget** button. The **Add Widget** window opens.
- 4. Enter a name for the new dashboard widget, and click **Select Widget Type** as shown.



[Figure 60] The Add Widget window

5. Click the **Done** button. The **Add Widget** window for the widget type you selected opens.



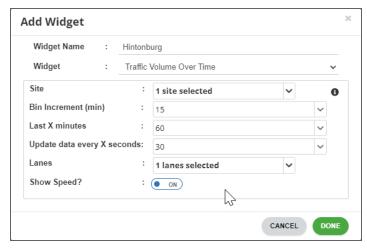
[Figure 61] TraffiCloud Widget types

### Setting up a Traffic Volume Dashboard widget

Use this procedure to set up a **Traffic Volume** Dashboard widget.

#### To set up a Traffic Volume Dashboard widget:

1. Add the **Traffic Volume** Dashboard widget (see *Adding widgets to your Dashboard* on the previous page). The **Add Widget** window opens. Here's an example with the data set up:



[Figure 62] The Add Widget window > Traffic Volume Over Time

2. Use the following table for help with your selections:

Widget field	What you can do		
Widget Name	Give the widget a representative name. For example, if you have signs in multiple districts, you could name the widgets by district.		
Widget	Select the Traffic Volume widget type.		
Site	Select the Site or Sites you want reporting on. Most organizations use a single Site here. When you select multiple sites, TraffiCloud sums them together.		

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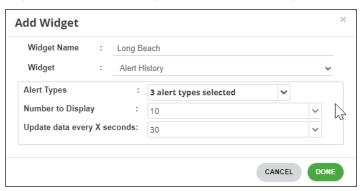
Widget field	What you can do
Bin Increment (min)	Groups the data in time increments of 15, 30, or 60 minutes.
Last X minutes	Sets the reporting period in minutes, from 30 to 300, in 30-minute increments.
Update every X seconds	Sets the update frequency, in seconds from 30 to 180, in 30-second increments.
Lanes	Sets the number of lanes to monitor, from 1 to 16. For Shield signs, set the number to 1.
Show Speed?	Sets whether speed should be displayed.

## Setting up an Alert History Dashboard widget

Use this procedure to set up an **Alert History** Dashboard widget. Alerts are event notifications sent to TraffiCloud users for issues such as low battery,tampering, and high speed or low speed (congestion) events.

#### To set up an Alert History Dashboard widget:

1. Add the **Alert History** Dashboard widget (see *Adding widgets to your Dashboard* on page 76). The **Add Widget** window opens. Here's an example with the data set up:



[Figure 63] The Add Widget window > Alert History

2. Use the following table for help with your selections:

Setting	What you can do
Widget name	Give the widget a representative name. For example, if you have signs in multiple districts, you could name the widgets by district.
Widget	Select the <b>Alert History</b> widget type.
Alert Types	Select which of your signs you want reporting on.

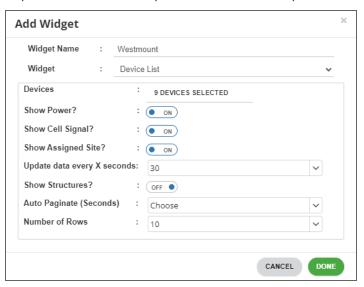
Setting	What you can do
Number to Display	Enable this option to have the widget display the electrical power status for the devices.
Update data every X seconds	Sets how often the data is refreshed, ranging from 30 to 180 seconds in 30-second increments.

## Setting up a Device List Dashboard widget

Use this procedure to set up a **Device List** Dashboard widget, listing the latest details about all of your ATS signs.

#### To set up a Device List Dashboard widget:

1. Add the **Device List** Dashboard widget (see *Adding widgets to your Dashboard* on page 76). The **Add Widget** window opens. Here's an example with the data set up:



[Figure 64] The Add Widget window > Device List

2. Use the following table for help with your selections:

Setting	What you can do
Widget name	Give the widget a representative name. For example, if you have signs in multiple districts, you could name the widgets by district.
Widget	Select the Devices widget type.
Devices	Select which of your signs you want reporting for.
Show Power?	Enable this option to have the widget display the electrical power status for the devices.
Show Cell Signal?	Enable this option to display the signal strength of the cellular modem in the device.

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Setting	What you can do
Show Assigned Site?	Enable to show the name of the Site.
Update every X seconds	Enable this option to set how often the data is refreshed, ranging from 30 to 180 seconds in 30-second increments.
Show Structures?	Enables display of parking structure names.
Auto Paginate (Seconds)	Forces the display to show the next or previous page at the specified interval (every 5 seconds, from 5 to 30 seconds).
Number of Rows	Specifies the number of rows in the widget data table.

# Chapter 10

## Administration

This chapter covers basic administration tasks you may need to perform as you get started with TraffiCloud.

Adding a user	82
Editing a user	84
Deactivating a user	85

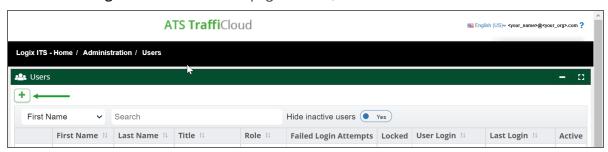
Administration p. 81

## Adding a user

Use this topic to add a TraffiCloud user.

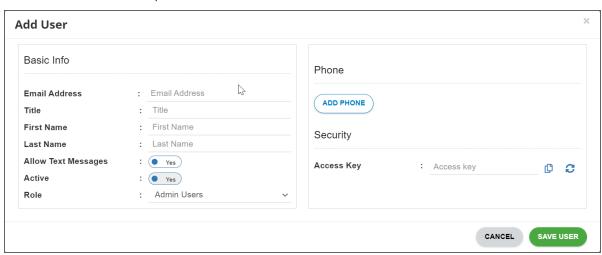
#### To add a user:

- 1. Click the **Administration** tab, and select **Users**.
- 2. Click the **Plus sign** under the **Users** page title bar, as shown here:



[Figure 65] The Add User button

The Add User window opens.



[Figure 66] The Add User window

3. Use this table for help with filling in the **Add User** fields:

Setting		Description
Basic Info		In this section, add the user's email address, identifying information, whether they should receive text alerts, and to specify their role.
	Email address	Add the user's corporate email address.
	Title	Add the user's title.

Setting		Description
	First Name/Last Name	Add the user's name.
	Allow Text Messages	Leave the slider at the default ( <b>Yes</b> ) and add the user's phone number with the <b>Add Phone</b> button. This slider must be set to <b>Yes</b> to permit the user to receive text-based alerts from the sign or device.  To deactivate text messaging for a user, move the slider to No.
	Active	Leave the default setting ( <b>Yes</b> ) to ensure the user has TraffiCloud access.  To deactivate the TraffiCloud user account, move the slider to <b>No</b> .
	Role	Choose the role you want to give to the user:  Admin Users  Admin Users  Power Users Limited Users Read Only Reporting Only
Here are the a		vailable roles and brief descriptions:
	Admin Users	Full privileges.
	Power Users	Full privileges, except for user management.
	Limited Users	Can edit most options, but can't create and delete.
	Read Only	Can view most options, but is unable to edit.
	Reporting Only	Can edit dashboards and reports only.
Phone	Add Phone	Click the button to add the user's phone number. You can add up to three numbers: <b>Home</b> , <b>Work</b> , and <b>Mobile</b> .
Security	Access Key	An access key is only necessary for users who require access to the API without having to log in. Please contact customer support if you want to use the API.

4. Click the **Save User** button.

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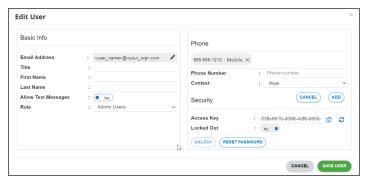
## Editing a user

Use this topic for help with editing a TraffiCloud user. You can edit the settings described in *Adding a user* on page 82, unlock locked out users, and reset passwords.

#### To edit a user:

- 1. Click the **Administration** tab, and select **Users**.
- Click the Pencil icon 

   beside the name of the user you want to edit. The Edit User window opens.



[Figure 67] The Edit User window

- 3. Do any of the following:
  - A. Edit any of the settings described in *Adding a user* on page 82.
  - **B.** If the user is locked out, move the **Locked Out** slider from **Yes** to **No**, and click the **Unlock** button.
  - c. If the user needs a password reset, click the **Reset Password** button. The user will receive a password reset email with a temporary password.
- 4. Click the Save User button.

## Deactivating a user

Use this topic to deactivate a user in TraffiCloud.

#### To add a user:

- 1. Click the **Administration** tab, and select **Users**.
- 2. Click the **Pencil** icon **孝** beside the name of the user you want to deactivate. The **Edit User** window opens.



[Figure 68] The Edit User window

3. Beside **Active**, move the slider to **No**.

By default, only active users display on the **Administration > Users** page. To show deactivated users, move the **Hide Inactive Users** slider to **No**.



[Figure 69] The Hide Inactive users slider

4. Click the Save User button.

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