# **TMC Monthly Operational Summary**



Bureau of Transportation Systems Management & Operations (TSMO)

#### NH Department of Transportation's Mission

Transportation excellence enhancing the quality of life in New Hampshire.

#### **Transportation Management Center's Mission**

The Transportation Management Center's mission is to detect, verify, and respond to incidents that affect the state transportation network. It serves to improve traffic operations, provide the public with current, accurate and useful travel and commuter information that promotes safe and efficient travel, as well as facilitates the maintenance of New Hampshire's transportation system.

### **New Hampshire Transportation Management Center Coverage Areas by District**

The State of New Hampshire is divided into six Districts and the New Hampshire Turnpike System comprising of approximately 9,266 lane miles.



#### **Permanent ITS Equipment List**

| Closed-Circuit Television (CCTV) Cameras   | 2020 Total | <b>2021 Total</b> |  |  |  |  |
|--|------------|-------------------|--|--|--|--|
| CCTV cameras are used to pinpoint and monitor traffic events so that information can be disseminated quickly and accurately. | 119        | 120               |  |  |  |  |
| Dynamic Message Signs (DMS)  |            |                   |  |  |  |  |
|  |            |                   |  |  |  |  |



| DMS aid in sending messages to motorists                     | 56              | 56              |
|--|-----------------|-----------------|
| to inform them of traffic events that may                    | 16 <sup>1</sup> | 16 <sup>1</sup> |
| be impacting their route ahead.                              | 20 <sup>2</sup> | 20 <sup>2</sup> |
| <sup>1</sup> Additional DMS that TSMO uses during the winter |                 |                 |
| season.  |                 |                 |

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# $^2\,\text{TSMO}$ is responsible for an additional $^{\sim}20$ DMS for the department.

# Road Weather Information System (RWIS)

A RWIS collects and displays data from a network of pavement and atmospheric sensors to provide site-specific weather and pavement surface condition information.



#### Variable Speed Limit Sign (VSL)

VSL are speed limits that change based on road, traffic, and weather conditions.



#### **Motor Vehicle Detection System (MVDS)**

MVDS are sensors that collect speed and volume data.



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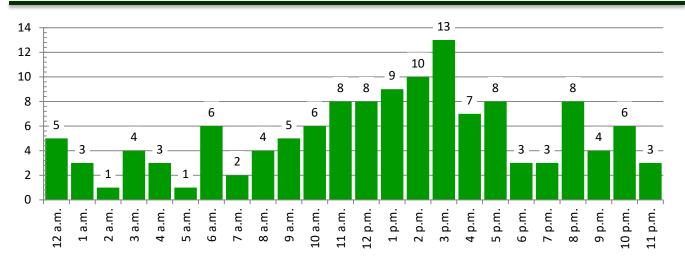
17



# **Summary**

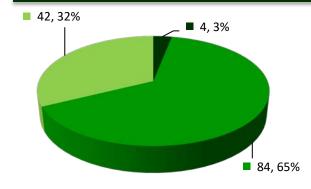
|  | Current Month                 | 2021 Total     |  |
|--|-------------------------------|----------------|--|
| Unplanned Incidents  | Total Unplanned Incidents     |                |  |
| Operators log information about each unplanned incident including date/time, location, traffic impact, and duration.           | 130                           | 1,078          |  |
| Planned Incidents  | Total Planned Incidents       |                |  |
| Operators log information about each planned incident including date/time, location, traffic impact, and duration.             | 417                           | 2,628          |  |
| Communication  | Total Calls                   |                |  |
| Operators log all incoming and outgoing control room communications, engaging various incident responders and stakeholders.    | 4,479                         | 33,378         |  |
| Work Zones Communication   | Total Construction Calls      |                |  |
| Construction related activities or communication that's outside of planned incidents.  | 2,202                         | 14,182         |  |
| DMS Messages   | Total Messages                |                |  |
| All changes to DMS are logged and reviewed.  | 21,912                        | 128,748        |  |
| Public Outreach  | Total NHTMC.com Webpage Users |                |  |
| Operators use Twitter and nhtmc.com to inform motorists about traffic events and other road related information.               | 1,161                         | 11,450         |  |
| Storm Desk Activations   | Total Storm De                | sk Activations |  |
| The TSMO Storm Desk is activated during storm events. The Storm Desk is utilized as a single point of contact to stakeholders. | 1                             | 1              |  |

# **Unplanned Incidents**



Increased staffing within the TMC is necessary during normal business hours to better facilitate daily operations while also managing unplanned incidents. Incidents are tracked by the time at which the operators are notified of the start of the event.

#### **Current Month - Incidents by Type**



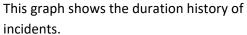
This graph shows the type of incident totals for the month.

#### **Types of Incidents:**

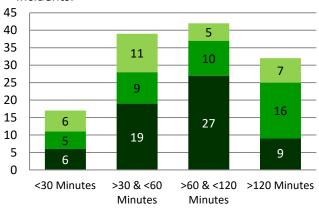
**No Closure:** No lane closures occurred during the incident. **Partial Closure:** Only a part of the roadway was closed. **Full Closure:** All lanes were closed during the incident.

#### **Current Month - Incident Duration**

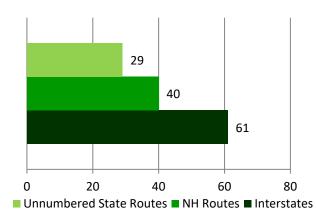
#### **Current Month - Incident by Road**



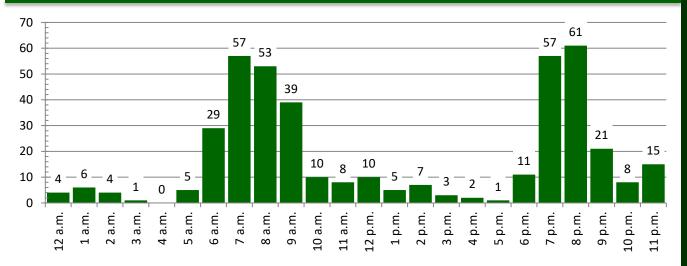
■ No Closure ■ Partial Closure ■ Full Closure



This graph shows which type of roadway the incidents occurred on.

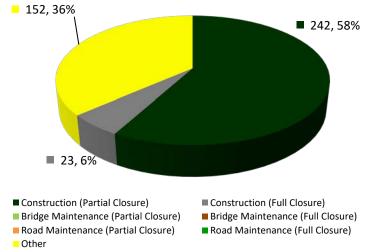


#### **Planned Events**



Additional staffing within the TMC is necessary during peak hours to meet the demands of daily planned operations. Planned Events are tracked by the time at which the operators are notified of the start of the event.

#### **Current Month - Incidents by Type**



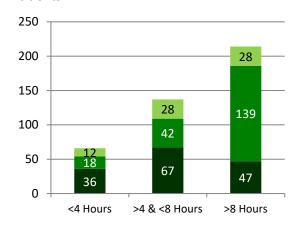
This graph shows the type of incident totals for the month.

Planned Events that impact the roadway, shoulder, or a ramp include events such as construction, bridge maintenance, or road maintenance. Each type could result in a partial closure or full closure.

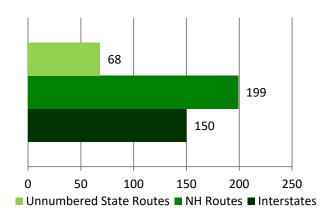
#### **Current Month - Incident Duration**

#### **Current Month - Incident by Road**

This graph shows the duration history of incidents.



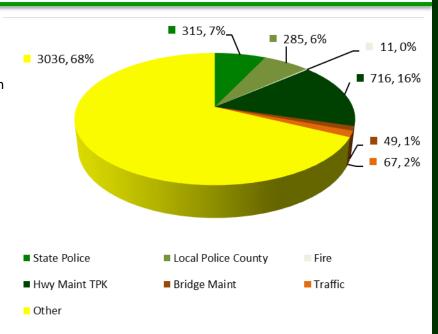
This graph shows which type of roadway the incidents occurred on.



# Communication

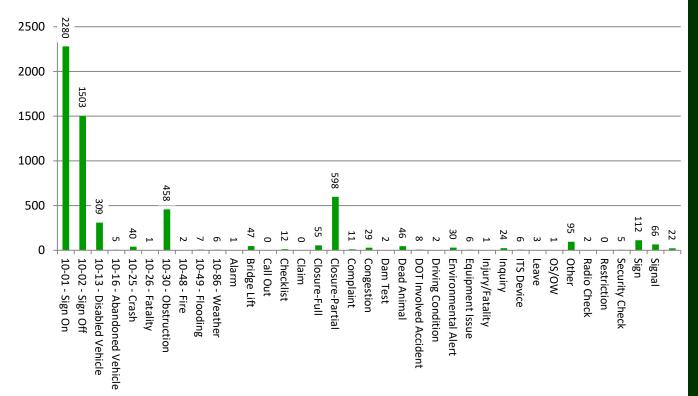
#### **Current Month - Calls by Type**

Dispatchers receive different types of calls throughout the day. They log the type of call and review this information monthly.



#### **Log Entries by Type**

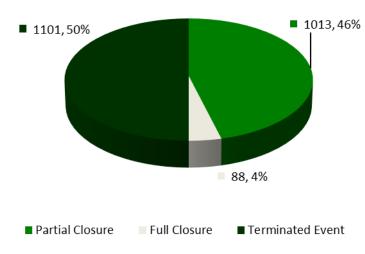
This graph shows the amount of log entries by type that TMC Operators have entered into the Compass ATMS for the current month.



## **Work Zone Communication**

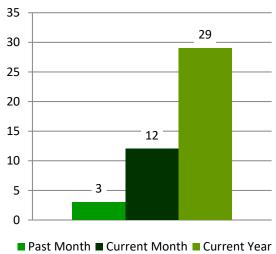
#### **Current Month – Construction Calls**

This graph shows the different types of construction related calls that dispatchers received.

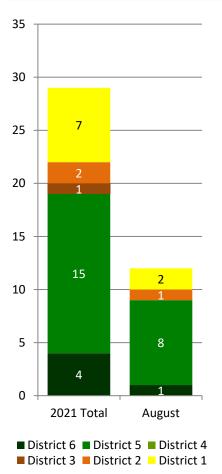


#### **Incidents Occurring in Work Zones**

This graph shows the total number of incidents reported on Work Zone Crash Reports from the Bureau of Construction.



#### **Incidents Occurring in Work Zones by Location**



The graph to the left shows the incidents occurring in work zones by district for the current month and for the current year.

The map to the right shows the current year total for incidents occurring in work zones by district.

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# **DMS Messages**

#### 

This graph shows the type of message that were relayed to the public by being displayed on the DMS.

# Total Messages - 2021 128,748 23,582 6,452 0 50,000 100,000 150,000 Total Messages 2021 Highest Month-July Lowest Month-January

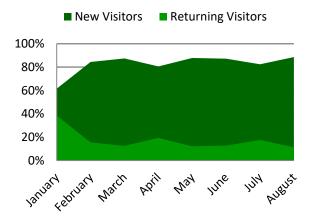
This graph shows the total messages that were posted to DMS for the year so far.

#### **Current Month - Total Messages Posted by Board**

| 101 E 52.8 FSV5               | 30   | 93 S 26.4 PSVT - SWZ - M02    | 47   | FEE N 1.2 FSVT                  | 46   |
|-------------------------------|------|-------------------------------|------|---------------------------------|------|
| 101E 114.8 FSV6               | 422  | 93 S 27.4 PSVT - SWZ - M01    | 34   | FEE N 18.8 FSVT                 | 15   |
| 101E 130 FSA6                 | 5    | 93 S 31.9 PSVT - SWZ - M07    | 90   | FEE S 3.8 FSDT                  | 29   |
| 101W 102.6 FSV5               | 25   | 93 S 5.2 VSL D5               | 15   | FEE S 8.6 FSPT                  | 13   |
| 101W 128 PSV6                 | 23   | 93 S EX 9 On-Ramp - SWZ - M09 | 30   | I-91 N VT 69.1 PSVT - SWZ - M06 | 12   |
| 293N 8.8 FSPT                 | 887  | 93 SM 10.7 VSL SE 5           | 1    | ST N 1.0 FSAT                   | 268  |
| 293S 1.4 FSD5                 | 39   | 93 SM 17.8 VSL SE 5           | 2    | ST N 4.4 FSST                   | 33   |
| 293S 4.8 FSDT                 | 29   | 93 SM 2.2 VSL D 5             | 15   | ST S 24.4 FSVT                  | 434  |
| 393 W 1.9 PSV5                | 13   | 93 SM 5.2 VSL D5              | 15   | ST S 3.4 FSDT                   | 5164 |
| 4E 92.4 FSS6                  | 7    | 93N 16.0 VSL D5               | 18   | ST S 7.8 FSAT                   | 3816 |
| 4E 98 FSA6                    | 22   | 93N 16.0 VSL D5 Median        | 16   | WA W 0.5 FSST                   | 12   |
| 89 N 56.8 PSVT - SWZ - M01    | 433  | 93N 23.4 FSD5                 | 965  |                                 |      |
| 89 N 57.2 PSVT - SWZ - M02    | 59   | 93N 26.8 PSVT                 | 35   |                                 |      |
| 89 N 59.8 PSVT - SWZ - M03    | 177  | 93N 32.9 FSST                 | 30   |                                 |      |
| 89 S 58.7 PSVT - SWZ - M07    | 11   | 93N 36.2 FSVT                 | 47   |                                 |      |
| 89 S VT 0.9 PSVT - SWZ - M05  | 10   | 93N 57.6 FSS3                 | 24   |                                 |      |
| 89N 1.8 FSV5                  | 201  | 93N 76.4 FSV3                 | 22   |                                 |      |
| 89N 18.4 FSV5                 | 23   | 93N 82.6 FSV3                 | 18   |                                 |      |
| 89N 35.5 FSV2                 | 18   | 93N 99.6 FSA3                 | 40   |                                 |      |
| 89N 54.9 FSS2                 | 19   | 93S 117.6 FSA1                | 10   |                                 |      |
| 89S 10.8 FSV5                 | 403  | 93S 122.2 FSV1                | 1    |                                 |      |
| 89S 3.4 FSV5                  | 1257 | 93S 23.4 FSD5                 | 205  |                                 |      |
| 89S 55.0 PSV2                 | 7    | 93S 27.8 FSDT                 | 762  |                                 |      |
| 91 VT S 70.6 PSVT - SWZ - M04 | 11   | 93S 30.3 PSVT                 | 72   |                                 |      |
| 93 N 0.5 FSDT                 | 208  | 93S 32.4 FSVT                 | 26   |                                 |      |
| 93 N 12.4 VSL SE 5            | 3    | 93S 36.5 FSST                 | 21   |                                 |      |
| 93 N 2.35 VSL D 5             | 16   | 93S 39.0 FSV5                 | 56   |                                 |      |
| 93 N 3.8 VSL D5               | 16   | 93S 43.3 PSV5                 | 22   |                                 |      |
| 93 N 6.6 VSL D5               | 17   | 93S 48.0 FSV5                 | 47   |                                 |      |
| 93 N 7.5 FSD5                 | 192  | 93S 68.8 FSV3                 | 27   |                                 |      |
| 93 N EX 9 On-Ramp - SWZ - M08 | 32   | 93S 7.2 FSD5                  | 156  |                                 |      |
| 93 NM 12.4 VSL SE 5           | 4    | 93S 85.4 FSV3                 | 23   |                                 |      |
| 93 NM 2.35 VSL D 5            | 15   | 95N 0.4 FSVT                  | 972  |                                 |      |
| 93 NM 3.8 VSL D5              | 16   | 95N 13.0 FSVT                 | 58   |                                 |      |
| 93 NM 6.6 VSL D5              | 18   | 95N 14.8 FSDT                 | 87   |                                 |      |
| 93 S 17.8 VSL SE 5            | 5    | 95N 3.0 FSDT                  | 1104 |                                 |      |
| 93 S 2.2 VSL D 5              | 16   | 95N 4.8 PSVT                  | 82   |                                 |      |
| 93 S 22.6 PSVT - SWZ - M06    | 59   | 95S 15.4 FSDT                 | 1160 |                                 |      |
| 93 S 23.3 PSVT - SWZ - M05    | 40   | 95S 3.4 FSPT                  | 37   |                                 |      |
| 93 S 25.1 PSVT - SWZ - M04    | 21   | 95S 7.2 PSVT                  | 73   |                                 |      |
| 93 S 25.6 PSVT - SWZ - M03    | 262  | 95S 7.6 FSDT                  | 534  |                                 |      |
|                               |      |                               |      |                                 |      |

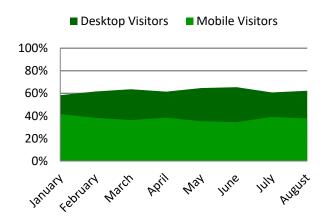
## 1,161 Users (Current Month) - NHTMC Website (www.nhtmc.com)

# **New/Returning Visitors**



This graph shows the ratio of new/ returning users that visited the NHTMC website. A new visitor is a user accessing the website for the first time. A returning visitor is a user who has accessed the website earlier.

# **Desktop/Mobile Visitors**



This graph shows the ratio of desktop/mobile visitors that accessed the NHTMC website.

