## **U.S. DEPARTMENT OF COMMERCE** National Oceanic and Atmospheric Administration NATIONAL WEATHER SERVICE

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MEMORANDUM FOR: Directors, NWS Headquarters Offices

Directors, NWS Regions

NWS Staff Offices

FROM:

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Director, Office of Climate, Water and Weather Services

SUBJECT:

Guidance for NWS Support for State/Local Departments of

**Transportation** 

Hazardous weather conditions can often negatively impact surface transportation. Local, municipal and state Departments of Transportation (DOTs) are at the forefront of mitigating the impact of weather-related hazards through proper planning and deployment of critical resources, and even closing roads when needed to protect the traveling public.

Our National Weather Service (NWS) has an uncompromising commitment to public safety and regularly interacts with a wide variety of partners to support its mission of protecting life and property. This includes interaction with DOTs to ensure they understand the information provided in our products related to hazardous weather, including winter weather conditions, that are anticipated or already occurring. NWS has been and will continue to provide these types of services.

NWS support of DOTs focuses on our expertise and understanding of the evolution and timing of hazardous weather events. The NWS does not have specialized expertise in forecasting surface/pavement conditions of roads, nor does NWS have the expertise to assess road treatment options. These types of comprehensive services, e.g., supporting winter road maintenance decisions, are available from America's Weather Industry (private sector providers of weather services). They include customized consulting services to provide value-added information or, in other words, information which goes beyond the strict provision of information related to expected weather conditions as it relates to travel safety.

As in the past, NWS personnel need to respond judiciously to all requests for forecasting support from our partners in the DOT. Attached are policy principles which clarify our role in supporting these partners. The public was recently given an opportunity to review these policy principles and, based on this review, we are confident that we are operating in the best interests of our users.

NWS will continue its uncompromising commitment to public safety, and we will continue to work with the private sector to provide the Nation with optimum weather services.

Attachment





## General

- NWS has an uncompromising commitment to public safety.
- Various inclement weather conditions may expose motorists to potentially hazardous weather conditions which can result in heightened threats to safety, life and/or property.
- DOTs require dependable understanding of, and communication with respect to, rapidly-evolving hazardous weather situations which impact public safety.
- NWS has a commitment to work with America's Weather Industry<sup>1</sup> to provide the Nation with optimum weather services, including information in support of safe motorist travel.
- NWS personnel need to respond according to NWS policy guidelines with respect to requests for forecasting support from DOTs, and responsibility for following policy with regard to serving DOTs rests with NWS management at all levels.
- NWS significant weather information available through standard NWS dissemination
  mechanisms such as NOAA Weather Radio, NOAA Weather Wire, NWS web pages
  and servers, and other commonly used dissemination systems, may satisfy some
  needs of DOTs for both text-based and graphical information; and DOT officials
  should be referred to those sources for such NWS information, while recognizing that
  America's Weather Industry also delivers NWS information.
- NWS partners in America's Weather Industry provide specialized weather support to DOTs including (but not limited to) customized weather information, warning, weather, radar and communication devices, and/or consulting services. This specialized weather support often falls in areas where NWS does not have expertise, such as forecasting road/pavement conditions and providing decision assistance for road treatment options.
- DOT officials, for their winter road maintenance decisions, may look to NWS standard products, as described above, and America's Weather Industry.
- NWS offices may respond to questions from (or initiate contact with) local, municipal
  and/or state DOTs for the purpose of ensuring motorist safety, and for protecting life
  and property. These interactions should focus on helping to facilitate an
  understanding by DOTs of our standard product content and of the evolution and
  timing of hazardous weather conditions.
- NWS/DOT interaction will also occur in certain non-routine situations that may be
  critical to public safety, such as fires, hazardous material incidents, heavy fog, and
  dangerous conditions that fall below the criteria for issuance of, or are not well
  covered by standard NWS products.
- NWS personnel should refer DOTs to America's Weather Industry for questions or service request that transcend NWS' mission. The NWS web site pages (<a href="http://weather.gov/im">http://weather.gov/im</a>) list these American Weather Industry resources.

<sup>&</sup>lt;sup>1</sup> America's Weather Industry includes all elements of the private sector (including media, consultants, equipment providers, etc.) which provide services to the public in the areas of climate, water, and weather. The term does not exclude foreign-owned companies which provide services to the American public.

## Examples of What NWS Personnel May Do

- Initiate contact with DOTs or respond to questions from DOTs regarding significant weather events where public safety is at risk. These interactions should focus on helping to ensure an understanding by DOTs of our standard product content and of the evolution and timing of hazardous weather conditions.
- NWS/DOT interaction may also occur in certain non-routine situations that may be critical to public safety, such as fires, hazardous material incidents, heavy fog, and dangerous conditions that fall below the criteria for issuance of, or are not well covered by standard NWS products.
- While for the most part, standard NWS products are expected to meet this need, NWS may initiate contact with DOTs if previously-issued forecast information has changed, particularly if it involves an expected change in temperature, precipitation or wind conditions that might significantly impact motorist safety, or if the timing of an expected event has substantially changed.
- Coordinate with DOTs on local mitigation activities for tropical weather systems and coastal extra-tropical systems (e.g., with respect to storm surge forecasting).
- Interact with DOTs to obtain severe weather and storm verification (e.g., via downed tree reports during cleanup and snow accumulation amounts).
- Interact with DOTs via Customer Service Workshops and "Awareness Weeks" (e.g., severe weather, winter).
- Participate in efforts to structure and enhance local 511 systems. NWS may work to help DOTs understand how to access or interpret existing products for use in local 511 systems. Creation of specialized products for local 511 systems would be left to our partners in America's Weather Industry.
- Coordinate with DOTs to support state frost networks and highway sign activation.
- Initiate calls with DOTs to validate actual observations with available automated observations.
- Provide DOTs with basic weather and SKYWARN training, including training on how to access and use standard NWS products of all types (including observations, warnings, forecasts, climatological information, and seasonal forecasts).
- Coordinate with DOTs on instant messaging systems to provide quick communications during rapidly changing events (e.g., fog which can result in major automobile pileups).
- Work with the firms from America's Weather Industry chosen by DOTs to assure
  access to local NWS weather warnings and forecasts that affect life and property.
  Interaction with all such firms should be carried out in a uniform and consistent
  manner for similar events.
- In accordance with NWS Instruction 10-401, NWS personnel may provide a site-specific forecast upon request of any local, municipal or state DOT official who legitimately indicates that the forecast is essential to public safety (e.g., due to impact on road conditions in high-impact traffic zones).
- Take advantage of communication opportunities with DOT officials as an outreach & education opportunity (e.g., phone conversations, customer workshops and/or tornado drills). However, NWS personnel should not use this outreach opportunity to provide routine weather briefings which are unrelated to the promotion of public safety and/or the protection of life and property.

- Coordinate and provide input in the selection of sites for DOT weather observation installation and upgrades (e.g. RWIS)
- Work with DOT in coordination and leasing of sites for NWS observation and dissemination instruments, equipment and platforms. This includes river gauges on state highway bridges, Tornado/Tsunami Warning sirens, and other NWS observing and dissemination equipment on DOT infrastructure/property.
- Consult with DOT regarding appropriate local warning and advisory criteria (e.g. winter weather and dense fog).
- Work with coastal DOT to participate in the NWS Volunteer Observing Ship and Marine Reporting programs (including training and installation of AMVER SEAS software and calibration of observation equipment on state and local ferries).
- Work directly with DOT prior to and during flood events impacting state and local transportation infrastructure (including events caused by ice jams, precipitation and/or rapid snow melt).

## Beyond the Scope of NWS Personnel

- It is NWS policy *not* to provide site-specific forecasts or direct forecasting support to city, county or state DOT officials when the support is not related to the promotion of public safety and/or the protection of life and property.
- NWS personnel will *not* provide specialized weather support and customized consulting services to DOTs (e.g., forecasts of road surface temperatures or provision of advice as to which road chemicals are best suited for a particular circumstance). As discussed above, requests for these specialized consulting services, including support for winter road maintenance decisions, will be referred to America's Weather Industry.
- NWS personnel will *not* provide customized products (e.g., customized seasonal forecasts) for the purpose of supporting DOTs with their planning which is not directly weather-related (e.g., optimizing pre-season salt purchases).