

WINTER MAINTENANCE STANDARDS (LEVELS) DEFINITIONS

OBJECTIVE:

The objective of these Winter Maintenance Standards (levels) is to provide maintenance areas with guidelines that will provide fairly uniform services and information to the public during a normal winter. During unusual or extreme winter conditions normal services will be provided as soon as available resource permits.

The Area Maintenance Chiefs will determine the actual roadway (route) priorities using the following guidelines to establish the most efficient use of equipment, manpower and materials.

Plowing, sanding and chemical anti-icing and deicing will be accomplished as follows:

LEVEL I (Urban)

§ All MDT maintained roadways with an average daily traffic (ADT) greater than 5,000 within a 3-mile radius of, or adjacent to, cities or towns.

These routes are eligible to receive up to 24 hours of coverage during a winter storm event. Snow plowing and anti/deicing operations may be continuous throughout the storm.

The primary objective will be to keep at least one travel lane in each direction open to traffic and to provide intermittently bare pavement as soon as possible. Snow plowing, anti-icing, and/or deicing operations may be continued after the storm to achieve an intermittently bare pavement in the primary travel lane. Remaining travel lanes and shoulders will be cleared as quickly as available manpower and equipment permit. In order to ensure the most efficient and effective utilization of available staffing and equipment, implementation of coverage time frames will be at the discretion of the Area Maintenance Chief.

Level I roadways are eligible for the development and implementation of anti-icing strategies using available remote weather information system (RWIS) information and weather forecasts in combination with accepted/efficient anti-icing techniques. When deemed appropriate, the application of anti-icing chemicals will normally commence prior to the storm with uniform and controlled predetermined coverage.

The application of abrasives, chemicals/abrasive combinations, and/or straight liquid chemicals for deicing is acceptable. Straight application of liquid chemicals (deicing) is acceptable to thin accumulations of snow/ice pack when acceptable weather conditions and effective application methods are employed.

LEVEL 1-A

§ **All Interstates and other MDT maintained roadways with an ADT greater than 3,000.**

These routes are eligible to receive up to 19 hours per day coverage, typically between the hours of 5:00 A.M. and 12:00 A.M., during a winter storm event. In order to ensure the most efficient and effective utilization of available staffing and equipment, implementation of coverage will be at the discretion of the Area Maintenance Chief. Snow plowing and sanding/deicing operations may be continuous throughout the storm.

The primary objective will be to keep the roadway open to traffic and provide an intermittently bare pavement surface in the main driving lane as soon as possible. The remaining lanes and shoulders will be cleared as soon as conditions and available manpower and equipment allow.

The exception would be when blizzard and/or other severe weather conditions exist that compromises the safety of maintenance personnel and/or the traveling public.

Anti-icing and sanding/deicing operation will typically be conducted prior to or during the storm. Deicing operations will normally consist of applying a predetermined quantity of a salt/sand mixture, liquid deicer/sand mixture or a straight application of deicing chemicals. The application of straight chemicals to snow packed or icy surfaces will not be a standard practice. The exception being where unique or extraordinary circumstances exist, and then only when acceptable weather conditions and effective application methods are employed.

LEVEL II

\$ All MDT maintained roadways with an ADT of 1,000 - 3,000 vehicles.

These routes are eligible to receive up to 17 hours of coverage, typically between 5:00 A.M. and 10:00 P.M., during a winter storm event. In order to ensure the most efficient and effective utilization of available staffing and equipment, implementation of coverage will be at the discretion of the Area Maintenance Chief. Snow plowing and sanding/deicing operations may be continuous throughout the storm.

The primary objective will be to keep one lane in each direction open to traffic. Snowpacked and/or icy surfaces are acceptable and may be treated with abrasives or an abrasive/chemical combination.

The exception would be when blizzard and/or other severe weather conditions exist that compromises the safety of maintenance personnel and/or the traveling public.

The plowing/removal of any snow packed or icy surfaces, widening of the traveled way, or the clearing of shoulders should be accomplished only during regularly scheduled work hours. The Area Maintenance Chief may authorize overtime if unique or extraordinary conditions exist.

Anti-icing strategies and techniques will not be implemented on Level II routes unless it can be cost effective to do so.

LEVEL III

\$ All MDT maintained roadways with an ADT of 200 - 1,000 vehicles.

These routes are eligible to receive up to 15 hours of coverage, typically between 5:00 A.M. and 8:00 P.M., during a winter storm event. When staffing and equipment is available, snow plowing and sanding operations will typically be conducted during the storm to keep the driving lanes passable. In order to ensure the most efficient and effective utilization of available staffing and equipment, implementation of coverage will be at the discretion of the Area Maintenance Chief.

The primary objective will be to keep one lane in each direction open to traffic and hills, curves, bridges and intersections should be treated with abrasives or abrasive/chemical combinations prior to ceasing operations.

The exception would be when blizzard and/or other severe weather conditions exist that compromises the safety of maintenance personnel and/or the traveling public.

Level III roadways may have snow packed and/or icy surfaces. Generally straight sections of roadway will not be sanded unless extraordinary circumstances exist. Additional snow removal will be accomplished during regular scheduled working hours. Generally, straight chemicals will not be used but should be applied in combination with abrasives.

LEVEL IV

\$ All MDT maintained roadways with an ADT of less than 200 vehicles.

On these routes winter maintenance activities will be normally accomplished during regularly scheduled working hours when staff and equipment are not being utilized to clear other roadways. Abrasives may be used on hills, curves, bridges and intersections. In order to ensure the most efficient and effective utilization of available staffing and equipment, implementation of coverage will be at the discretion of the Area Maintenance Chief.

If surface conditions become too hazardous to be safely negotiated, these roadways may be closed for extended periods of time until resources are available to plow the traveled way. When temporary closures are required, signing will be in accordance with MUTCD standards and authorities will be notified of the closure as well as when the roadway is reopened.

LEVEL V

\$ Seasonal Roadways

These roadways will receive no scheduled winter maintenance activities. These roadways are seasonal or designated as non-maintained route.

Classification	Type Roadway	Typical Coverage Time	Recommended Levels
Level I	Urban (3-mile radius) routes with 5,000 or greater ADT	24 hours or until a bare pavement is achieved in the primary driving lane(s)	All lanes should have intermittently bare pavement before coverage time is reduced. This should be accomplished using an anti-icing program.
Level 1-A	Interstates or Roadways with 3,000 or greater ADT	19 hours - 5:00 A.M. till 12:00 A.M. or until intermittently bare pavement exists in the primary driving lane(s)	The right lane on divided roadways and both lanes on two-lane roads should have bare wheel paths with intermittent bare pavement before coverage time is reduced.
Level II	High Volume Roadways with ADTs greater than 1,000 but less than 3,000.	17 hours - 5:00 A.M. till 10:00 P.M. or until snow packed and/or icy surfaces have been treated with abrasive, or abrasive/chemical combinations	Both lanes should have reasonable pavement surface with sanded hills, bridges, intersections and curves before coverage time is reduced.
Level III	Low Volume Roadways with ADTs greater than 200 and less than 1,000	15 hours - 5:00 A.M. till 8:00 P.M. or as available personnel and equipment permit and until hills, curves, bridges and intersections have been deiced or sanded	A reasonable pavement surface each with intermittent sanded areas (hills, bridges, intersections and curves) should be attained before coverage time is reduced.
Level IV	Roadway with an	8 hours or during	Should provide a plowed

	ADT less than 200	regularly scheduled work hours and only as personnel and equipment permit	roadway surface during regular scheduled work hours. Abrasives may be used on hills, bridges, curves and intersections.
Level V	Seasonal Roadways	N/A	Those roadways that receive no scheduled winter maintenance.

All P. M. 10 air quality non-attainment areas will receive a level of service based on the individual non-attainment area's requirements.

The Department's snow and ice control operations are limited by budget limitations on personnel, equipment and materials available for winter maintenance operations. Due to the limited resources available, six levels of service have been established. Factors which should be considered when establishing the level of service for a specific route is as follows.

- C Safety
- C Average daily traffic (ADT)
- C Commuter routes
- C Availability of alternate routes
- C Public interest and concern
- C Potential economic impact
- C Consequence of not providing a higher level of service
- C Available resources

NOTE: If the Area Maintenance Chief and/or District Administrator have justification why a roadway should receive a different service level than the guidelines indicate, a letter of justification shall be sent to the Maintenance Division Administrator indicating the change, the reason for the change, and what effects the change will have on the areas winter maintenance budget. For the purpose of these guidelines, all roadways are considered to be school bus routes.

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