

## 4/ OTHER PRE-WINTER PLANNING

All major arteries and feeders, including interstates, primary and secondary roads should be included in an agency's Sensible Salting program. Primary routes should have higher priority than secondary roads.

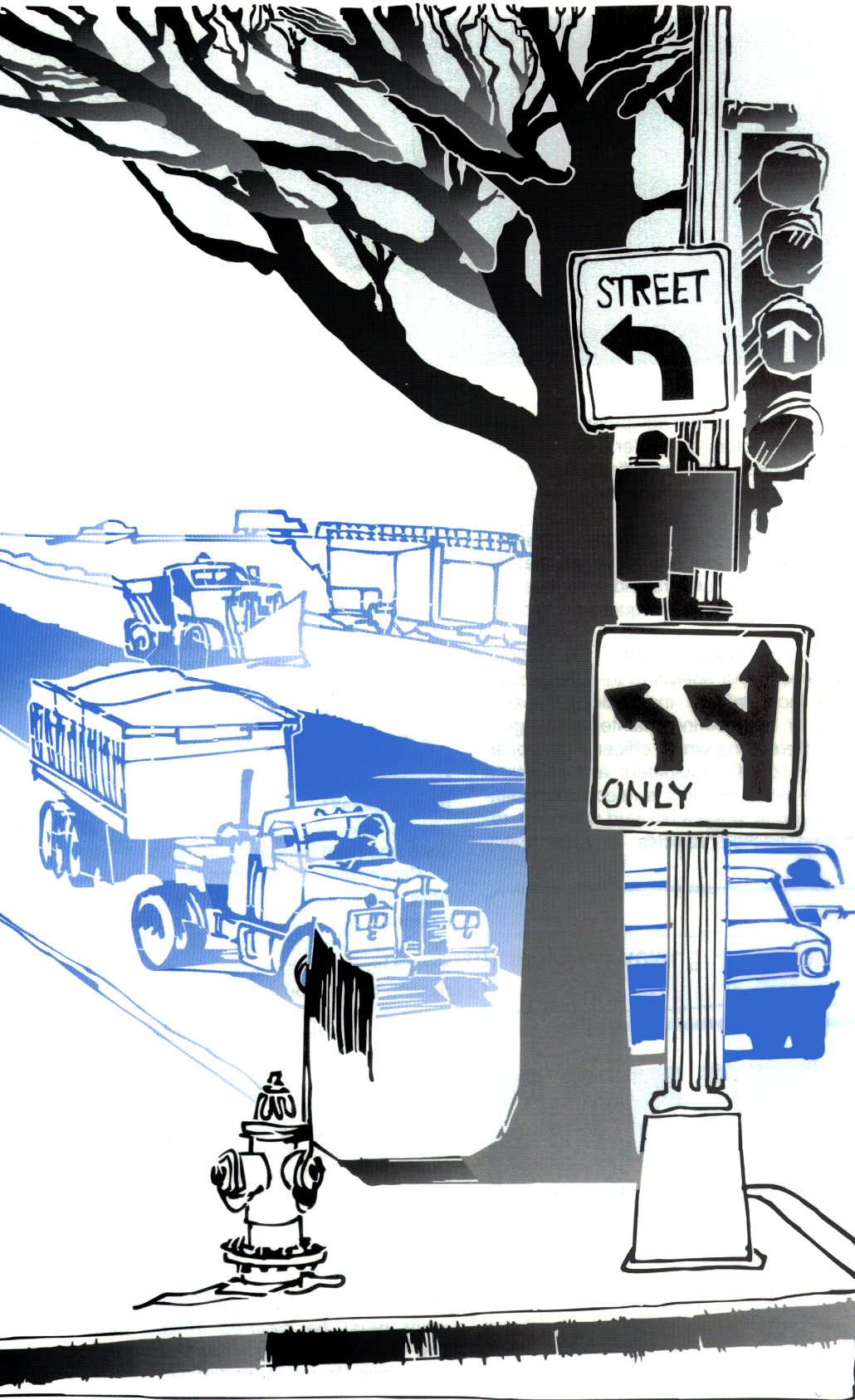
Only someone thoroughly familiar with a given locality can assign levels of maintenance and schedule performance of the work for optimum results. Local traffic patterns, traffic volume, the needs of local industry and business and special problems created by topography or climate must be considered.

However, here are a few guidelines for determining required levels of maintenance:

- Many agencies determine maintenance levels based on average daily traffic (ADT).
- Give priority to important local arterials, including school bus routes, access roads to industrial parks or major plants, mail delivery routes and streets leading to hospitals, fire stations and maintenance garages.
- Provide safe pavement on all truck routes that carry heavy vehicles around a city or through selected sections. Remember that these routes require around-the-clock attention.
- Carry levels of maintenance to logical stopping points, such as traffic signals, intersections or slow speed zones. This priority gives motorists time to adjust to the shift in maintenance levels.
- Make sure maintenance sections link or overlap. Leaving a gap between sections on a high-speed roadway can present potentially hazardous conditions.

Interstate and expressway routes that pass through or near cities carry increased traffic volumes onto city arterials. Ramps and other approaches to major city routes need special attention. A bare

*Give priority to hospital, school, mail and truck routes, other important local arterials, carry maintenance to logical stopping points and mark fire hydrants and other utility points for quick location.*





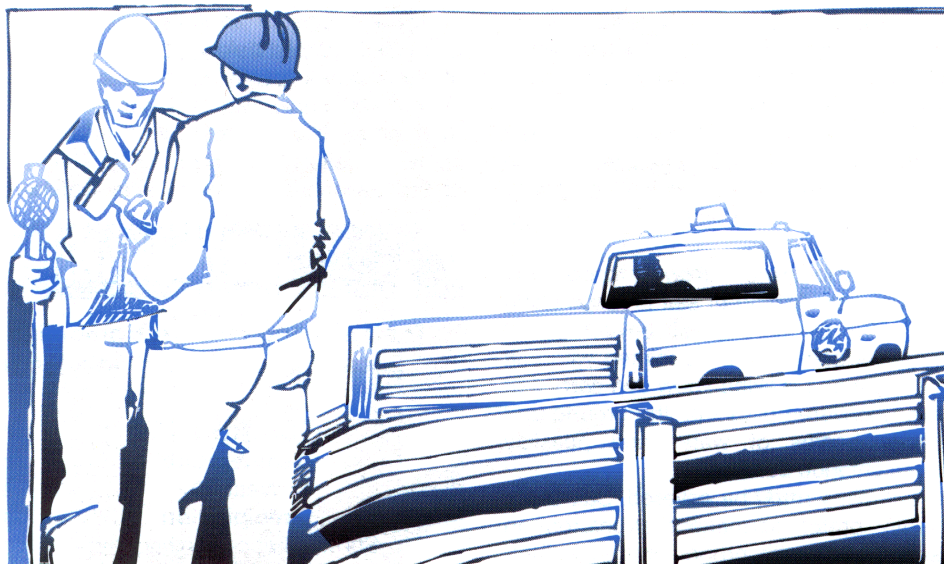
street or road is worthless unless traffic can get on and off. Plow and salt ramps of major arterials early in storm.

After thorough planning has been done, post a master-map showing routes, snowplowing and salting schedules and equipment and operator assignments. For added control, give each driver an individual map of his route or area. Be sure to update maps each year to show new roads, interchanges, streets, bridges and governmental boundary lines.

**For top efficiency** in scheduling operations, aim for maximum equipment and manpower utilization. Try setting up salt routes that bring spreaders back to storage sites as they empty. It may be desirable to stockpile salt at several locations so spreaders won't waste time "deadheading."

Spreading rates differ based on types of storm, weather conditions and operational procedures. Application rates generally range from 300 to 800 pounds per two-lane mile. **For convenience in estimating your season needs, the following chart is based on four 500-lb. applications per storm.**

**Mark the spots that won't be there.** Before winter, mark all structures, such as drop inlets, catch basins, ends of curbing and guardrail and fire hydrants. Once covered with snow, they will be difficult or impossible to see from a plowing or



spreading vehicle. Use special markers to pinpoint locations of drains and waterways that must be opened after each storm.

**Where does snow fencing go?** Only practical experience and analysis can tell where to erect snow fencing. Where it is placed depends entirely upon topography, prevailing winds and existing vegetation. Fencing should never be erected nearer than 75 to 100 feet from the centerline. It always is placed on the side of the roadway from which prevailing winter winds

blow and should be perpendicular to wind direction, not necessarily parallel to the road. Positioning of snow fencing may be changed from one year to the next. Slopes, grading and tree growth often alter placement.

**Notify property owners.** Remember to contact property owners before erecting snow fence outside rights-of-way. In long fence sections, leave an occasional gap so livestock can go through. It is good community relations and will prevent damage to fencing as well.

## TONS OF SALT REQUIRED PER SEASON

(Based on 4 applications of 500 lbs. per 2-lane mile per storm)

No. of Storms	Miles of Two-lane Highway on Clear Pavement Standard						
	100	200	300	400	500	600	700
4	400	800	1200	1600	2000	2400	2800
6	600	1200	1800	2400	3000	3600	4200
8	800	1600	2400	3200	4000	4800	5600
10	1000	2000	3000	4000	5000	6000	7000
12	1200	2400	3600	4800	6000	7200	8400
14	1400	2800	4200	5600	7000	8400	9200
16	1600	3200	4800	6400	8000	9600	10,200
18	1800	3600	5400	7200	9000	10,800	11,600
20	2000	4000	6000	8000	10,000	12,000	14,000

*Note: Minimum storage requirement is usually half of annual salt use.*

*This chart is computed on the basis of one ton of salt per two-lane mile per storm, or four 500-lb. applications per storm.*

*Note: These are average figures. Conditions in some areas require several times the salt needed in some other areas.*