

Maintenance Department

Requiring the greatest amount of the Road Commission's basic revenues and employing more than half of all Road Commission employees is the Maintenance Department. The department is assigned to a multitude of activities. Winter safety snow plowing and de-icing are priority traffic services. The department conducts repairs to road surfaces, shoulders and rights of way year-round. These functions are performed on the 2,450 miles of county roads and, by contract, on the 251 miles of state trunklines—including freeways within the county. The department oversees a fleet of 392 vehicles and hundreds of items of equipment, and has custodial oversight of the Road Commission's buildings and grounds. It employs 263 persons under Director William "Bert" Mercer and has an \$8.2-million budget for 1978.



CHARLIE WELCH of Pontiac, a 31-year Road Commission employee, invented a safer method of fastening the chains that regulate the spread of tailgates when dump trucks are spreading material. By means of an extension arm and pin, the gate may be released whether or not a load is pressing against it without the driver being forced to risk limbs. Welch earned a special award from the Road Commission for his invention, which is being installed on Road Commission vehicles.

13 Miles Could be Paved with Asphalt Used in Potholes

The Oakland County Road Commission devotes more than \$8 million annually to Maintenance Department activities—or almost 30 percent of its total budget.

Only construction is a more expensive item in the budget, and then only because federal and local government matching funds are included in the construction budget. Maintenance is funded totally from state-collected gas and weight taxes, including contract payments by the Michigan Department of State Highways and Transportation for Road Commission maintenance of state trunklines which include freeways in the county.

During 1977 the Road Commission Maintenance Department:

- Spread 44,359 tons of de-icing salt, which cost more than a half million dollars. That's enough to melt 3.1 billion pounds of ice at 30 degrees Fahrenheit.
- Used 13,526 tons of asphalt to repair potholes and edge breaks. That's enough to pave a two-lane road for 13 miles.
- Used 6,092 tons of material to repair roadway base. That's the equivalent of 50 tons per day.
- Placed 437,000 tons of gravel on 282.6 miles of gravel roads in a special program of placing three inches of new gravel in cooperation with local units of government and

the Board of County Commissioners. The \$1.3 million was shared 40 percent by the Road Commission, 40 percent by the 17 benefitting townships and 20 percent by the County Board.

- Graded a total of 12,836 road miles, or the equivalent of 11 times over the 1,164 miles of county gravel roads.
- Used 39,499 tons of gravel for general gravel road patching, or enough to place three inches on more than 25 miles of two-lane gravel roadway.
- Reconditioned gravel shoulders for 6,606 miles, or the equivalent of five times along the gravel shoulder of every paved road.
- Cleaned 4,301 drainage structures and 135,000 feet of ditches.
- Devoted 6,504 manhours to litter cleanup.



WILLIAM MERCER
Maintenance Director

'Blizzard of '78' Was Blinger; Cost \$353,000

The "Blizzard of '78" was one of the most difficult storms ever to hit Oakland County. Not only was 13 inches of snow dumped in a 48-hour period beginning early on a Thursday morning; it was preceded by an inch and a half of rain and was accompanied by winds exceeding 35 miles per hour.

Drifting during the storm made the job of plowing almost futile. When the winds subsided and snow could be removed, the water beneath froze three and four inches thick. Efforts to remove that ice were frustrated by a salt shortage.

Despite the adversities, Road Commission winter maintenance personnel had main roads passable by Sunday afternoon following the storm and at least one lane had been punched through side roads and subdivision streets by Monday. Clean up of our subdivision residential streets was virtually complete by the following Friday, while in Detroit that job was barely begun.

It cost \$353,000 to fight that blizzard on the 2,672 miles of roads maintained by the Road Commission. Wages and fringe benefits for Road Commission crews alone—from pre-dawn hours January 26 through February 1—cost \$80,200, of which three-quarters was for overtime. The cost of salt and sand used totalled \$40,800.

The Road Commission called in 14 private contractors to help on the second day and the U.S. Army Corps of Engineers hired additional private contractors on the 4th day. The private contractors worked through the eighth day following the initial storm. Oakland County was in the "best shape of any in Michigan" by that time, according

to the Army Corps of Engineers colonel assigned to this district.

The cost of private contractors was \$105,000 of the \$353,000 total storm costs computed.

The salt shortage that occurred during the storm was due primarily to failure of salt supply companies to fill Road Commission orders as much as three weeks previous to the storm. The Road Commission's six maintenance garages had full salt storage facilities when winter began. Early winter storms took some garages to below capacity while waiting for deliveries, and then a severe two-day storm struck January 8-9. After battling that storm the supply shortage was critical.

Salt Purchased For Emergencies

The Board of Oakland County Road Commissioners has taken several steps to head-off a salt supply shortage such as occurred during the "Blizzard of '78" and other instances during the past two Winters.

The most drastic step has been to commit funds desperately needed for other purposes to a special "emergencies only" salt storage pad, cover, and 5,000-ton supply of salt. The contract for the environmentally sound pad was let October 2 at a cost of \$40,863. The cover is expected to cost \$3,000. The salt is expected to cost \$60,000.

The emergency supply will be used only when the continuing 8,000 to 12,000-ton supply in the six district maintenance facilities is depleted and needs on the road system are paramount.

Purchases Require More Than \$4.4 Million of Your Money

With more than \$4.4 million worth of equipment, materials, supplies and parts budgeted to be purchased in 1978, the Oakland County Road Commission Purchasing Department has been kept busy.

De-icing salt costs alone amount to more than one-half million dollars annually and requires replenishment of stockpiles at six maintenance garages constantly during Winter, said Purchasing Director George Suarez.

About three-quarters of all budgeted purchases are for road maintenance functions, including road graders at \$54,000 each; 190 drums of motor oil at \$12,000; 3,000 road grader blades at \$160,000; six snow plows at \$10,000; 15 hydraulic underbody scrapers at \$39,000; and 92 truck tires and 154 truck tire tubes at \$12,000.

The traffic services operations also require some hefty purchases, such as 4,500 steel sign posts at \$26,000; 30,000 feet of electrical cable at \$8,000; 24,000 traffic signal light bulbs at \$9,000; 225,000 pounds

of glass beads used for reflectivity in pavement marking paint at \$32,000; 28,500 pounds of instant-dry paint powder at \$46,000; 53,000 gallons of paint at \$131,000; 550 sign decals at \$5,000; 1,500 aluminum street sign blanks at \$2,000 and 20 traffic signal pedestals at \$3,000.

For engineering-construction purposes, outside materials testing and inspection service costs \$8,000.

"These as just samples from lots purchased during 1977 and 1978, for which the Board of Oakland County Road Commissioners accepted competitive bids," said Suarez.



GEORGE SUAREZ
Purchasing Director