



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL REPORT

Date: February 17, 2021  
To: Mark F. Miller, City Manager  
From: Kurt Bovensiepe, Public Works Director  
Subject: City of Troy's Snow and Ice Control Procedure- Service Level Report

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The City of Troy's Snow and Ice Control Procedure document was last presented to City Council as a report on January 9, 2012 (Item N-06). Since the procedure is not a policy it did not require City Council action. The procedure details the goals and objectives for mitigating snow and ice hazards by assigning priorities to designated roads, thresholds to deploy staff, and the roles and responsibilities of specific Department of Public Works positions. The procedure provides guidance to ensure the Department of Public Works provides a consistent and predictable level of service. Because the service level is predictable, it allows to more accurately budget for snow and ice removal operations. Recent snow events have engaged the Department of Public Works to determine if it is feasible to increase the level of service when plowing local or subdivision roads.

Currently, consideration to plow local roads begins when accumulations exceed 4 inches. There are over 269 miles of local roads in the City of Troy. In efforts to meet the goals in the procedure, the city solicits pricing from contractors to assist in the operation. Often, pricing is established through one or two companies and City Council grants the authority to use other contractors at the established rates. Since these are mostly underground and pavement contractors the equipment used is generally front loaders, road graders, and pick-up trucks. These pieces of equipment remove snow less efficiently than a traditional large angled plow truck. The most recent event we were able to secure four (4) contractors, one of which was a land clearing contractor. On average, we are able to secure three (3) contractors for each event and ask about six (6) contractors. Contractor participation is dependent on the availability of its equipment and staff. Most contractors of these types lay-off its staff in the winter months and take the opportunity to thoroughly maintain the large equipment while it is not being used. Using additional contractors to increase the level of service for snow and ice removal operations is not feasible for the reasons stated above.

During snow and ice removal operations the Streets and Drains Division uses all available personnel from all divisions in the Department of Public Works. This includes staff from the Water and Sewer Division, Grounds Division, and Fleet Division. Equipment used includes large angle plowed trucks with wing plows to pick-up trucks with plows. The Department of Public Works has balanced the necessary pieces of equipment to the total available personnel, which is often considered as right sizing the fleet. Increasing the service level would require additional equipment and additional personnel. Considering three to four pieces of equipment and staff are deployed to a square mile while plowing local roads this would cost an additional \$700,000 in capital expenditures and \$300,000 in annual personnel expenditures. Adding this additional crew to the operation would increase efficiency by approximately 10%. Meaning, an event that would normally take us 24 hours would reduce it to approximately 22.5 hours.



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Another option to increase the service level in local road snow removal is to adjust the priorities. Currently the City of Troy has an agreement with the Road Commission for Oakland County to maintain snow and ice control for county roads. If the city did not maintain these roads and allowed the county to maintain them we would be able to redeploy this equipment to local road snow removal. This would essentially adjust the priorities to the major roads in Troy as the Road Commission does not provide the same level of service to major roads as we have in the past.

The Department of Public Works strives to provide a high service level to constituents while being fiduciary responsible with public funds. Troy's snow and ice control procedures are comparable to surrounding communities. On average, there are three to four snow events a year that causes the city to plow local roads. Over preparing for these types of events with additional staff and equipment would decrease the available funds for road repairs.