# cityofnovi.org

#### CITY of NOVI CITY COUNCIL

Agenda Item 2 November 23, 2009

**SUBJECT:** Policy discussion regarding levels of service for winter road maintenance.

SUBMITTING DEPARTMENT: Department of Public Services – Field Operations Division (M, )



CITY MANAGER APPROVAL

#### BACKGROUND INFORMATION:

Although a formal policy is not in place, the City's current snow and ice removal practice is to achieve "bare pavement" on all major and neighborhood roads within 24 hours of the end of a winter storm event. This is a very high level of service that DPS crews have successfully attained over the past several winters. However, implementing this policy comes at a very high cost - not only financially, but also in terms of impact to the environment and potentially to crew safety (see attached June 11, 2009 memorandum).

Several communities that Novi benchmarks itself against (Farmington Hills, Rochester Hills, Livonia, Ann Arbor and Troy), have adopted winter maintenance policies for local roads that essentially state that overtime will not be used until a 4" snow accumulation exists on local roads, except for curves intersections and hills; or during ice storms.

Based on a detailed analysis as described in the attached November 5, 2009 memorandum, an adjusted level of service for local roads could result in an estimated savings in overtime labor and salt costs of approximately \$118,000 per year without sacrificing public safety. The level of service on major roads would remain unchanged.

The Department of Public Services is requesting that a policy discussion take place to determine whether the current practice should be revised, and a formal policy with a particular level of service adopted.

**RECOMMENDED ACTION:** Policy discussion regarding levels of service for winter road maintenance.

4 0 V N

1	2	Y	N
	1	1 2	1 2 4

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Staudt				

#### MEMORANDUM



TO:

ROB HAYES, P.E., DIRECTOR OF PUBLIC SERVICES

FROM:

MATT WIKTOROWSKI, FIELD OPERATIONS SENIOR

MANAGER

SUBJECT: DRAFT WINTER ROAD MAINTENANCE POLICY

DATE:

**NOVEMBER 18, 2009** 

The purpose of this memorandum is to present a draft winter road maintenance policy that addresses appropriate levels of service for snow and ice control operations in the City of Novi. This draft policy would serve as the basis for discussion at a future City Council meeting.

#### DRAFT POLICY

#### Background

The city provides snow and ice control services on all public roads and streets in the City of Novi. During the winter, the city maintains a roadway system that includes nearly 20 miles of county roads (Grand River Avenue, Ten Mile, Twelve Mile, and Novi Road); 40 miles of major city roads (Nine Mile, Eleven Mile, Thirteen Mile, South Lake, East Lake, West Park Drive, Wixom Road, Beck, Taft and Meadowbrook Road); and, 141 miles of local roads (i.e., residential/neighborhood streets and commercial/industrial roads).

#### Objective

The objective of this draft winter road maintenance policy is to provide a safe roadway system during the winter season by performing effective and efficient snow and ice control services that:

- Provide for safe traveling conditions for motorists;
- Reduce the likelihood of economic losses to the city and businesses; and,
- Assist police, fire and emergency medical services in fulfilling their duties.

#### Levels of Service

The City of Novi uses two prioritized levels of service for performing winter road maintenance based on the type/severity of winter storm events and road classifications:

#### Level 1: Snowfall Less Than Four (4) Inches; No Accumulation of Ice

Major city and county roads will be plowed and salted on a continuous basis as needed to keep the pavement as bare as possible at all times. Once major roads are cleared, local roads will be plowed and spot-salted on a continuous basis as needed at steep grades/sharp curves and at intersections only.

During normal weekday working hours, local roads will be cleared to keep the pavement as bare as possible.

#### Level 2: Snowfall of Four (4) Inches or More; Any Accumulation of Ice

Major city and county roads will be plowed and salted on a continuous basis as needed to keep the pavement as bare as possible at all times.

Once major roads are cleared, local roads will be plowed and salted on a continuous basis as needed to keep the pavement passable at all times during a storm. Crews will continue to work on local roads on a continuous basis to achieve bare pavement once the storm has ended.

Please let me know if you need any further information in regard to this draft policy. I look forward to the opportunity of discussing it with Council at a future meeting.

cc: Jerry Tremblay, Roadway Asset Manager

#### MEMORANDUM



TO:

CLAY PEARSON

FROM:

ROB HAYES, DIRECTOR OF PUBLIC SERVICES AH

SUBJECT: LEVEL OF SERVICE - ROAD WINTER MAINTENANCE

DATE:

JUNE 11, 2009

For fifthe letonie

Conference

Conference I recently attended the American Public Works Association's North American Snow Conference in Des Moines, Iowa. The conference was very informative and included many technical and management-based sessions aimed at providing "best practices" for roadway winter maintenance. Several topics centered on managing winter maintenance operations in light of declining transportation revenues and rapidly rising costs of snow and ice removal.

The City's current snow and ice removal policy of providing "bare pavement" on all major and neighborhood roads within 24 hours of a winter storm event is a very high standard that DPS crews have successfully attained over the past several winters. However, implementing this policy comes at a high cost - not only financially, but also in terms of its impact to the environment and potentially to crew safety:

- The 2008/2009 winter was harsh but not abnormal for southeast Michigan, yet we were 20.4% over-budget in all three road categories (local, major and municipal road funds) for providing the labor, material and equipment needed to clear City roads according to the current policy. In overtime labor alone, DPS was roughly 30% over-budget this past winter.
- Providing this high level of service also means that a greater amount of salt gets applied to the City's roads. Dissolved chlorides from rock salt enter the City's storm drainage system, corrode storm structures and potentially harm fish, aquatic plants and other organisms in the City's water courses. The use of rock salt can also have a detrimental effect on lawns and trees.
- Finally, the policy poses a potential safety risk because DPS crews often work overtime to achieve the current level of service, and there is not always the opportunity to ensure that our operators get adequate rest between shifts. Fortunately, no accidents attributable to operator fatigue have occurred in recent years.

While at the conference, I queried several fellow public services professionals and found that none provide the same level of service as Novi. Most meet the bare pavement standard for major roads, but have a much less stringent standard for neighborhood roads.

I also checked with several surrounding communities to determine what level of service they provide and found that Farmington Hills, Rochester Hills, Livonia, Ann Arbor, and Trov all require that major roads and emergency routes are plowed and salted upon any accumulation of snow or ice, but neighborhood roads are only addressed following an accumulation of four (4) inches or more of snow. (Otherwise, neighborhood roads are only spot-salted on curves and hills and at intersections.) The rationale behind implementing an adjusted level of service for

neighborhood roads is that they have lower speed limits and traffic volumes, and are still trafficable with an overlying accumulation of snow.

Based on what I learned at the conference and from my local colleagues, I recommend that the City of Novi's current snow and ice removal policy be revised by adjusting the level of service provided for neighborhood roads. Doing so would help to mitigate environmental and safety risks associated with winter maintenance activities, and would result in cost savings in terms of reductions in overtime labor, salt and equipment use. A rough estimate of cost savings realized by implementing a revised policy ranges from \$50,000 to \$100,000 for an average winter.

Please let me know if you have any questions or comments in regard to this recommendation or the 2009 APWA Snow Conference in general.

cc: Pam Antil, Assistant City Manager
Matt Wiktorowski, Field Operations Senior Manager

#### MEMORANDUM



TO: CLAY PEARSON, CITY MANAGER

FROM: ROB HAYES, DIRECTOR OF PUBLIC SERVICES A

SUBJECT: LEVEL OF SERVICE - ROAD WINTER MAINTENANCE

DATE: NOVEMBER 5, 2009

This memorandum provides background and a recommendation regarding the level of service provided on Novi's local roads during the winter season.

It is important that an agency have a road winter maintenance policy and a formal set of corresponding procedures so that the public understands how the city will handle snow and ice removal operations during the winter driving season, especially in terms of priorities and the level of service for each road classification (i.e., major roads, emergency routes, local or neighborhood roads). Although it has never been formally adopted, the city's de facto winter maintenance policy has been to provide a level of service such that bare pavement is achieved on all roads in the city within 24 hours following a winter snow and/or ice storm event.

From strictly a public safety perspective, there is no real benefit to achieving this bare pavement standard for local roads (i.e., neighborhood streets) except on those portions of local roads with steep grades, sharp curves, and at intersections; and unless ice accumulates on the pavement). This is because local roads have low speeds and low traffic volumes, hence they pose a relatively low risk until a significant snow accumulation exists. Several of the communities that Novi benchmarks itself against have adopted winter maintenance policies for local roads that essentially state that overtime labor will not be used until a 4-inch snow accumulation has occurred on local roads, except for curves, intersections and hills; or during ice storms. Otherwise, most of the benchmarked cities clear local roads to a condition generally bare of snow as soon as reasonably possible after the winter storm event, without working overtime.

City Council may wish to adopt a formal winter maintenance policy that spells-out an adjusted level of service for local roads during the winter driving season. Doing so would provide benefits in terms of not only cost savings, but also enhanced environmental and infrastructure protection, and improved operator safety. Limiting the application of rock salt would limit the detrimental effect on the environment and infrastructure caused by dissolved chlorides entering the city's storm drainage system, corroding storm structures, and harming fish, aquatic plants and other organisms. Limiting overtime labor would reduce the likelihood that our operators are on the road for extended periods of time when they would be subject to operator fatigue.

The environmental and employee safety benefits are difficult to quantify, but based on historical data from the past three winters, the cost savings to be realized from adjusting the current level of service for local roads has been summarized in the attached tables. The two cost components that would be affected most by adjusting the level of service are overtime labor and salt use. Because our financial system accounts for overtime as an aggregate amount in the general fund (as opposed to separately in the road funds), we used salt use data as a way to

determine savings factors. Tables 1 and 2 describe how different cost savings factors were derived based on data from the 2008/2009 winter, and Table 3 summarizes anticipated cost savings at different levels of service:

- Table 1 summarizes local road salt use data for the 2008/2009 winter season, and shows that a total of 56.5 inches of snow fell during 41 discrete snow events (an event may span more than one day), and that 316 loads of salt were placed during snow and ice removal operations. The last four columns show the number of loads that would have been "saved"/not needed if a different level of service were in effect. For example, if the city had a local road level of service to address snow accumulations greater than or equal to 4 inches, then 200 loads of salt would have been saved last year.
- Table 2 presents the calculation of savings factors for four different levels of service corresponding to 4-inch, 3-inch, 2-inch, and 1-inch snow accumulations. Using the example above, for a 4-inch accumulation level of service, 200 loads of salt would have been saved out of the 316 loads placed during the season, for a savings factor of 63% (200 ÷ 316).
- Table 3 applies these savings factors to the average expenditures for overtime labor and salt use over the past three winter seasons, and presents the total estimated savings for each of the four different levels of service. As shown in the last column of Table 3, if the level of service for local roads were adjusted to snow storm events with accumulations of at least four inches, then approximately \$118,000 could be saved (roughly \$46,000 saved in overtime and \$72,000 in salt costs).

Based on this analysis, I recommend that Council adopts a policy that local roads will only be addressed once a 4-inch snow accumulation has occurred, except for ice events and any amount of snow/ice on curves, intersections and hills. Otherwise, local roads will be cleared as soon as reasonably possible after the winter storm event ends, without working overtime. The bare pavement standard would remain intact for all roads during ice events, as well as for major roads including emergency routes during any snow or ice event.

Implementing this adjusted level of service for local roads should result in an estimated savings in overtime labor and salt costs of approximately \$118,000 per year without sacrificing public safety. This annual savings could be used to supplement the city's local road summer maintenance program, which would help the city achieve its roadway asset management goals. In addition, this less aggressive level of service for local roads would help preserve our roadway infrastructure and enhance the environment by reducing the amount of salt that degrades pavement and storm structures and pollutes Novi's water courses. Finally, this adjusted level of service would help to ensure operator safety by reducing operator fatigue caused by excessive overtime labor.

Regardless of which level of service policy is adopted, DPS staff will prepare a detailed set of procedures to describe in greater detail how winter maintenance will be performed beginning in winter 2009/2010. These procedures will not only help to better inform the public, but they will also help guide our operators in the field to function as effectively and efficiently as possible.

Please let me know if you have any questions, comments or concerns regarding this recommendation.

cc: Pam Antil, Assistant City Manager
Matt Wiktorowski, Field Operations Senior Manager

TABLE 1
WINTER 2008/2009 - SALT USE DATA AND PROJECTED SAVINGS AT DIFFERENT LEVELS OF SERVICE

Winter Mt_	Туре	Total Snow		_	Level of Service ≥ 4	Level of Service ≥ 3-	Level of Service ≥2	Level of Service ≥ 1-
Event #	of Precipitation	Accumulation (inches)	DAY DATE	Local Roads Total Loads	# Loads Saved; Storm Events < 4" & No Ice;	# Loads Saved: Storm Events < 3" & No fee:	# Loads Saved: Storm Events < 2" & No ice:	# Loads Saved: Storm Events < 1" & No Ice:
1	Black ice / xways	0	Monday, November 10, 2008	0				
2	tcy Roads	0	Monday, November 17, 2008	5				
3	Light Snow	Yrace	Wednesday, November 19, 2008	1	1	1	1	1
4	Light Snow	Trace	Thursday, November 20, 2008	0	0	0	0	C
5	Light Snow	Trace	Friday, November 21, 2008	1	1	1	1	1
6	Light Snow	Trace	Monday, November 24, 2008	15	15	15	15	15
7	2" of Snow	2	Tuesday, November 25, 2008	8	8	8		
8	3.5" of Snow	3.5	Sunday, November 30, 2008	20	20			
	cont from Sunday	Trace	Monday, December 01, 2008	12	12			
9	Light Snow	Trace	Tuesday, December 02, 2008	11	11	11	11	11
10	spot salt in subs	Trace	Thursday, December 04, 2008	1	1	1	1	1
11	:"of snow	1	Friday, December 05, 2008	12			-	
	3.5" of Snow	3.5	Saturday, December 06, 2008	22				
12	Wintery Mix	Trace	Monday, December 08, 2008	8	8	8	8	8
13	Light Snow	Trace	Wednesday, December 10, 2008	17	17	17	17	17
14	Freezing Rain/Snow	Trace	Saturday, December 13, 2008	1			- 1/	1/
15	3.5 inches of snow	3.5				-		<del> </del>
16	10 5 inches of snow	10.5	Wednesday, December 17, 2008 Friday, December 19, 2008	24	24			
17	-			22				
18	1" of snow & drifting		Sunday, December 21, 2008	5	5	5	5	
	Drifting snow/cleanup		Monday, December 22, 2008	2	2	2	2	2
19	2" of Snow	2	Tuesday, December 23, 2008	8	8	8		-
20	Blackice in Morning	0	Thursday, December 25, 2008	0				
21	Black ice in Morning	0	Friday, December 26, 2008	5				
22	2 inches of snow	2	Tuesday, December 30, 2008	. 3	3	3	<del></del>	
23	Light snow	Trace	Wednesday, December 31, 2008	0	0	0	- 0	0
24	spot salt in subs	Trace	Friday, January 02, 2009	2	2	2	2	2
25	spot salt in subs	Trace	Monday, January 05, 2009	2	2	2	2	2
26	Black (ce	0	Tuesday, January 06, 2009	5				
27	1.5 inches of snow	1.5	Wednesday, January 07, 2009	17	17	17	17	-
28	1 inch of snow	1	Thursday, January 08, 2009	5	. 5	5	. 5	
29	1 inch of snow	1	Friday, January 09, 2009	3	3	3	3	
	cont. from Friday	Trace	Saturday, January 10, 2009	0	0	0	0	
30	2°Snow -No Salt	2	Tuesday, January 13, 2009	2	2	2		
31	2"Snow -No Salt	2	Wednesday, January 14, 2009	0	0	0		i
32	4" of Snow	4	Saturday, January 17, 2009	3				
	carry over from Sal	Trace	Sunday, January 18, 2009	2				
33_	Salting Subs 35 deg	0	Thursday, January 22, 2009	13	13	13	13	13
34	1" of snow	1_	Tuesday, January 27, 2009	6	. 6	6	6	-
35	3" of Snow	3	Wednesday, January 28, 2009	16				
	2.5" of snow	2.5	Thursday, January 29, 2009	5				
36	Dusting of snow	Trace	Saturday, February 14, 2009	7	7	7	7	7
37	1" of snow	1	Thursday, February 19, 2009	2	2	2	2	
38	2" of Snow	2	Saturday, February 21, 2009	3				
	Additional 3" of snow	3	Sunday, February 22, 2009	14		1		
39	spot salt in subs	Trace	Monday, February 23, 2009	3	3	3	3	3
40	.5" of Snow	0.5	Sunday, March 29, 2009	0		0	0	0
41	3 " of Snow	3	Monday, April 6, 2009	1	1			
	Carry over from Monday		Tuesday, April 7, 2009	1	1			
	TOTALS	: 56.5		316	200	142	121	83

## TABLE 2 SAVINGS FACTORS BASED ON ADJUSTED LEVELS OF SERVICE (WINTER 08/09 DATA)

4" Storm WINTER 2008/2009 -LOCAL ROADS					
	# of Winter Maintenance Days:	48			
	# of Storm Events:	41			
	# of Storm Events > or = 4" or Ice:	<u>11</u>			
	# of Storm Events < 4" and No Ice:	30			
	# Loads Saved: Storm Events < 4" & No Ice:	200			
	# Loads Total:	316			
	Savings Factor:	63%			
	Therefore, approximately two-thirds of the ov devoted to plowing and salting during events				
3" Storm	WINTER 2008/2009 -LOCAL ROA	DS			
	# of Winter Maintenance Days:	48			
	# of Storm Events:	41			
	# of Storm Events > or = 3" or Ice:	14			
	# of Storm Events < 3" and No Ice:	27			
	# Loads Saved: Storm Events < 3" & No Ice:	142			
	# Loads Total:	316			
	Savings Factor:	45%			
	Therefore, approximately one-half of the over				
	devoted to plowing and salting during events				
	,				
2" Storm	WINTER 2008/2009 -LOCAL ROAL	os			
	# of Winter Maintenance Days:	48			
	# of Storm Events:	41			
	# of Storm Events > or = 2" or Ice:	19			
	# of Storm Events < 2" and No Ice:	22			
	# Loads Saved: Storm Events < 2" & No Ice:	121			
	# Loads Total:	316			
	Savings Factor:	38%			
	Therefore, approximately one-third of the over	all effort on local roads was			
	devoted to plowing and salting during events v	vith less than 2" and No Ice			
1" Storm	WINTER 2008/2009 -LOCAL ROAD	<u>os</u>			
	# of Winter Maintenance Days:	48			
	# of Storm Events:	41			
	# of Storm Events > or = 1" or Ice:	<u>25</u>			
	# of Storm Events < 1" and No Ice:	16			
	# Loads Saved: Storm Events < 1" & No Ice:	83			
	# Loads Total:	316			
	Savings Factor:	26%			
	Therefore approximately one guarder of the au-	arall affort on local roads was			
	Therefore, approximatelyone-quarter of the over devoted to plowing and salting during events we				

# TABLE 3 ESTIMATED COST SAVINGS IN OVERTIME AND SALT FOR DIFFERENT LEVELS OF SERVICE

		Average Cost of	Average Cost of Salt	Estimated Cost of		
		Overtime on Local	Placed on Local	Overtime on Local	Estimated Cost of Salt	
		Roads Based on	Roads Based on	Roads Based on	Placed on Local Roads	
Proposed Level of Service for Local Road		Current LOS (Bare	Current LOS (Bare	Proposed Level of	Based on Proposed Level	<b>Total Estimated Cost</b>
Winter Maintenance	Savings Factor (Based on	Pavement) for Past 3	Pavement) for Past 3	Service (1" to 4"	of Service (1" to 4"	Savings (Overtime &
(Snow Accumulation in Inches and/or Ice)	Winter 08/09 Data)	Winters	Winters	Acuumulations)	Acuumulations)	Salt)
4" or More	63%	\$73,000	\$113,590	\$26,797	\$41,697	\$118,095
3" or More	45%	\$73,000	\$113,590	\$40,196	\$62,546	\$83,847
2" or More	38%	\$73,000	\$113,590	\$45,047	\$70,095	\$71,447
1" or More	26%	\$73,000	\$113,590	\$53,826	\$83,754	\$49,009



NEWS AUTOS BUSINESS SPORTS ENTERTAINMENT LIFE OPINION OBITUARIES INDEX

CLASSIFIEDS JOBS CARS REALESTATE RENTALS

SHOPPING		
	(Charles)	Co.yl

#### METRO DETROIT

LOCAL NEWS MAIN: DETROIT | OAKLAND | WAYNE | MACOMB | MICHIGAN | POLITICS | LOTTERY

POSTED: NOV. 3, 2009

Major highways will get less plowing and salting Budgets force counties to scale back for 2009-10

BY MATT HELMS FREE PRESS STAFF WRITER

Comments (33)

Recommend (3)

not

ma1 Letter to the editor

Strained budgets will mean that for the second year in a row, drivers statewide will have to contend with major highways not plowed or salted as often as they used to be, officials said Monday.

In metro Detroit, the Michigan Department of Transportation has told county road commissions that expressways will largely take priority, leaving some major primary roads — like Groesbeck in Macomb County, Woodward in Detroit and Oakland County and segments of Michigan Avenue and Ford Road in western Wayne County — in two-track conditions at times to cut costs.

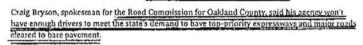
MDOT said the state's budget for winter upkeep has remained flat in recent years, even as prices of salt and gasoline have risen dramatically. And two years of heavy snow didn't help: The National Weather Service said metro Detroit had 137.4 inches of snow over the last two winters, a level not seen in in nearly a century.



"We became very used to having our roads clear at all times in the metro area," said Bob Hoepfner of the Road Commission of Macomb County. "We can't afford to do that anymore."



Hoepfner said the state's edict also includes cutting down on overtime patrols.



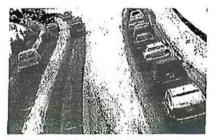
"We have as many people as we can afford on the roads, and unfortunately that's 40 fewer than last year," Bryson said.



WWJ-TV (Channel 62) chief meteorologist Jim Madaus said early forecasts for this winter call for a return to more normal temperatures and snowfall, which is about 44 inches on average.

#### Comments »

Click the link above to read and share your thoughts on this story



The National Weather Service said metro Detroit had 137.4 inches of anow over the last two winters, a level not seen in in nearly a century. Above, a scene on the Lodge Precway near Warren Avenue in Detroit has winter. Early forecosts predict a normal snowfall for this winter. (KIMBERLY P. MITCHELL/DETROIT PREE PRESS)

A version of this story appears on page 3A of the Tuesday, Nov. 3, 2009, print edition of the Detroit Free Press.

#### MORE METRO DETROIT HEADLINES

- Polls open; Detroit clerk expects good turnout
- Budget cuts mean major highways will get less plowing and salting
- . H1N1 flu vaccine shortage possible
- Thieves strike Yps Janti Hungry Howie's
- Live blog: Ferndale turnout remains light

# Text Alerts

Get breaking news alerts sont to your phone.

Enler your phone number:

Your n'e (optional)

Sex: @ Maie O Femaia

Z-p:

Ago:

Continue

T & C. | Privacy | Cancel Alens
Powered by ANEO, Standard Measaging Rotes or other occupes
apply, To Ophoculters STOP to 4NEO (44630). For more information
text HELP to 4NEO (44538). Contact your carrier for more disblis.

PLACE AN ALL OY FREEP COM

#### MOST POPULAR

MOST POPULAR, MOST COMMENTS & MOST RECOMMENDED

1. Kilpatrick got cash far ahead of loan signing



The Division of Public Works currently maintains a network of more than 58 miles of major streets and 243 miles of paved and unpaved local streets. Farmington Hills has the ninth largest municipal street network in the state of Michigan and the largest municipal network in Oakland County.

The DPW oversees all routine maintenance of the City's street system including pavement patching and replacement, road grading, litter control, street sweeping, roadside mowing and landscaping, forestry services, storm drain

landscaping, forestry services, storm drain maintenance and improvements, ditching, guardrail repairs, sign maintenance, and snow and ice control. Additionally, City crews provide mowing and litter control services to 40 miles of county roads.

Ensuring safe driving conditions is the primary objective of the road maintenance program. Improving the aesthetic quality of the street network in the City of Farmington Hills is also a priority.

#### Snow and Ice Removal

The City provides snow and ice control throughout the winter months for its 300-mile road network. These streets fall into one of three categories; major roads, school bus routes, and subdivision streets. Major roads and school bus routes receive the highest priority; they are plowed and salted following any accumulation of snow or ice. Local streets are plowed following accumulation of four inches or more of snow. If the accumulation is less than



four inches, subdivision streets are spot salted, on hills, curves, and intersections. The DPW staff, in conjunction with Police dispatch, are on-call seven days a week to respond to road hazard conditions or storm events. These services are provided for all roads under the City's jurisdiction. Throughout Farmington Hills, however, there are roads under the jurisdiction of the Road Commission for Oakland County, the Michigan Department of Transportation, Wayne County, and our neighboring Cities of Southfield and Farmington.

#### School Bus Routes

The Farmington School District has selected the primary road link between the City's major street network and the district's elementary schools. These links are then designated as school bus routes. Note that these routes do not include all roads driven by school buses. School bus routes are plowed and/or salted following any accumulation of snow and ice.

#### Sidewalks

The City does not plow or salt sidewalks. Although requests for this service have been reviewed for years, the City has adopted a policy of not providing snow and ice control for the City's sidewalk network. Given the frequency of thaws in Southeastern Michigan, pedestrians can safely use sidewalks throughout most of the winter. Sidewalk snow removal



programs in other communities have resulted in extensive landscape damages and, on occasion, caused increased hazards due to icy sidewalk surface conditions.

#### SalvSand Barrels

The City places 55-gallon drums filled with a mixture of sand and salt at intersections and hills upon request from homeowner groups. If your association is interested in having barrels placed within your subdivision, please send a letter, along with a clear description or sketch of the location, to



# I'm looking for...

#### hills highlights...

City Hall Revitalization Project Brochure

More hills highlights...

comprehensive document library.

#### city news...

- No Garbage Pickup on Thankspiving Day
- Turkey Fryers Pose Safety Risk
- Farmington Hills Center for Active Adults announces December programs
- \*Mixed Media by Susan Warner\* at City Gallery through Jan, 8
- Steinkopf Nursery /Youth Program Fund Raiser

More city news...

#### comprehensive document library.

#### upcoming events...

11/17/09 Steep Well (Senior Adult Division)

11/17/09 Stay Healthy at the

11/17/09 Green Efforts Committee Meeting

11/17/09 Committee to Increase Yoter Participation Meeting

11/17/09 MCMR presents a "Root Beer Summi" on Diversity November 17 at the Maxfield Training Center

More upcoming events

comprehensive event information ..

the Division of Public Works at 27245 Halsted, Farmington Hills, Michigan, 48331, or email the DPW. It is important to obtain the approval of the property owner adjacent to the selected location, given that spilled salt may burn the crass

#### Other Roads

There are a number of county and state roads that pass through Farmington Hills and are directly linked with the City's road network. County roads, as well as MDOT highways, are maintained throughout the winter months by the Road Commission for Oakland County maintenance staff. Like the Farmington Hills DPW, the Road Commission maintenance staff is on call 24 hours a day to respond to emergencies and weather.

business development | government | community | services | departments | reference desk | catendar | library home | sitemag | search | help | privacy policy

City of Farmington Hills 31555 W. Eleven Mile Rd. Farmington Hills, MI 48336-1165 Phone: I2481871-2400 Heurs of operation: Menday - Friday, 8:30AM - 4:30PM

Report Technical Website Problems | Website Feedback | Site Use Policy

site design Municipal Web Services

shde.



"People Come First"

# The City of Livonia

• Contact Us • FAQ's

Tuesday, November 17, 2009

Home | Departments | Government | Community | Contact Us

Search Site

Search

Forms & Publications

Snow Removal
DPW Engineering Home
DPW Public Service
Home
Snow Removal

Departments

e-Government

Roads Maintained

by Wayne County

8 Mile Rd.

Inkster Rd.

Middlebelt Rd.

Merriman Rd.

Farmington Rd.

Haggery Rd.

Eckles Rd.

Wayne Rd. (south of Plymouth)

#### PUBLIC SERVICE SNOW REMOVAL IN LIVONIA

Each year the snow and ice control program for city streets is evaluated for ways to reduce increasing costs while maintaining service. The Wayne

Joy Rd.

1-96

**I-275** 

5 Mile Rd.

6 Mile Rd.

7 Mile Rd.

Plymouth Rd.

County Department of Public Services maintains most of the mile roads within the City. The City of Livonia is responsible for maintaining approximately 360 miles of neighborhood streets. For the majority of the winter, the emphasis is on salt spreading and snow plowing City streets which have been designated as "24/7 Routes", along with the "Weekday Routes" of main connector streets through subdivisions that provide residents access to a serviced road within a quarter mile.

Each snowfall creates unique circumstances, with decisions based

on snowfall amounts and weather predictions. Conditions can vary from one area of the city to another. The Public Service division follows the developing weather and road conditions carefully, evaluates maintenance needs, and mobilizes personnel and equipment to respond accordingly. Road conditions are inspected by supervisory personnel. Additionally, the Livonia Police Department monitors road conditions after normal working hours and notifies appropriate Public Service Division Supervisory personnel to respond to hazardous driving conditions.

The following guidelines are used to address a snow or ice event.

Local streets maintained by the City are classified into three categories:

24/7 ROUTES: Through streets that are considered arterial roads. These streets are salted and plowed on an as needed basis 24 hours a day, 7 days a week.

Weekday ROUTES: Streets that are serviced Monday through Friday or otherwise when necessary, thereby giving a serviced street within a quarter of a mile of most residents.

The remaining neighborhood streets are dealt with on an as needed basis as described below.

Please click here for a map of the city salting route. The map is in Adobe format.

#### Level I: Light Snowfall



For snowfalls of approximately four inches or less, priorities are:

 Keep 24/7 routes as clear a possible with an emphasis on salt spreading, with plowing possible as needed.

# Quick Shortcuts

Online City Ordinances

Property Tax and Assessing

Pay your property taxes online using a credit card

Foreclosure Information

Parks & Recreation Online Registration

e-Service for Public Works

e-News Sign-ups

**Snow Emergency Notify** 

Livonia Video Communications Center

City Council On-Demand Video

e-Maps

Available Job Postings

**Emergency Preparedness** 

**Community Transit** 

Census 2010

Economic Development





Weekday routes are maintained Monday through Friday with salt spreading and/or plowing as needed after emergency 24/7 routes are complete.

#### Level II: Moderate Snowfall

With accumulation of approximately of four to eight inches, a snow emergency may be declared, especially if mixed with rain or if heavy drifting occurs.)

- All city streets will be plowed.
- Snow removal equipment will work around the clock.
- Residents will be expected to move all vehicles from the streets to expedite snow removal.

Priorities are to clear all 24/7 routes and weekday routes, then clear all remaining City streets, including cul-de-sacs, dead ends and service drives, curb to curb within approximately thirty hours after the end of the storm.

#### Level III: Major Snow Storm

Accumulation in excess of eight inches has the same response as Level II, with the recognition that completion of city wide plowing will require more time depending of the severity of the storm. A snow emergency will be declared that will require all parked vehicles be removed from the roadway until the roadway is cleared.

#### Livonia Code of Ordinances:

10.63.060 Time limit for removal of parked vehicles or trailers--Impoundment conditions. Within six (6) hours after notice of a snow alert has been given, any motor vehicle or trailer parked on any street, road or avenue with the city shall be removed. Any vehicle or trailer parked on any street, road or avenue in violation of the provisions of this section may be removed and impounded by order of the police department and the owner shall be required to pay towing, impounding and storage costs prior to the return of the vehicle or trailer in addition to any fines and costs which may be assessed for the violation of this chapter. (Ord. No. 2794, § 4; Ord. 1666 § 1, 1982: Ord. 1551 § 1 (part), 1980: prior code § 6-906).

#### For further information on snow removal...

- Call the Public Service Division at (734) 466-2655 for the current status of the snow and ice control during each winter storm.
- Watch Livonia City Channel 8 on cable TV. They will announce when all the city streets are being plowed during substantial snowfalls.
- Listen for the Michigan Emergency Patrol announcements on many radio stations.

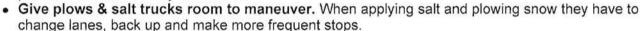
Home | Sitemap | Departments | Government | Community | FAQ'S | Contact Us | Legal/Privacy Notice 33000 Civic Center Drive Livonia, Michigan 48154 | (734) 466-2200 |
Last Updated Tuesday, November 17, 2009 | ©Copyright 2009 City of Livonia, Michigan. All Rights Reserved.

## Snow Removal Procedures City of Troy

Never underestimate Michigan winters. They bring everything from heavy snowstorms to frigid wind chills to warm rainy weather - often within days of one another. When the snow does hit - our plows have hundreds of miles of roadway to clear.

We offer these tips to help the City of Troy crews make your travels faster and safer:

 Don't Park on the Street! Move your cars out of the street and especially cul-de-sacs into the driveways when an accumulating snow is predicted. It is difficult to maneuver trucks around on dry pavement let alone in icy conditions.



- Don't pass trucks when salt is being applied or snow is being plowed. Keeping control of your vehicle can be extremely difficult.
- Don't pull out into the intersection when snowplow trucks are approaching. Drivers cannot
  control the snow coming off the plow blade. The snow often contains rocks and other debris from
  the roadway.
- Don't shovel snow into the street when clearing sidewalks, driveways and parking lots. This makes clearing the roadway more difficult and creates more hazardous ice patches.
- Dig out Fire Hydrants if there is a fire hydrant at your curb please try to uncover. In the event of
  a fire emergency this could help save a life by helping the fire department locate the hydrant more
  quickly.

### What roads get plowed first?

The City of Troy prioritizes snow and ice control operation to make the roads safe and accessible during the winter season:

- · First Priority Major City and County Roads
- Second Priority City Industrial Roads
- Third Priority School Entry Roads
- · Fourth Priority- City Local Roads

#### Why don't subdivisions always get plowed?

Plowing operations on local roads (subdivisions) will be initiated when snow accumulates more than 4 inches. These 360 miles of local roads take 24 hours to clear after a snowstorm passes. When snow accumulates 8+ inches or we have complications like freezing rain, clearing will take longer than the standard 24 hours. For snowfalls less then 4 inches, we salt and sand the hills, intersections and curves as needed.

## What about the lump of snow in my driveway

Snow plows typically leave a lump of snow at the ends of driveways as they clear the roadways. If the City had the means to clear that lump, we would. Why can't we? It would take weeks instead of 48 hours



to completely plow the City. There just aren't enough hours, staff, money and equipment to do it. We need residents to take responsibility to clear the lump of snow at the end of their driveway. If you have a neighbor that needs help, please give them a hand.

Please do not shovel the snow back into the street. It can create dangerous ice patches for all drivers.

For information about snowstorm activities or reporting a dangerous condition, contact the Public Works Department at 524-3392. Make this a safe winter season and drive carefully.

Home

Last modified: 1/11/2005

# City of Rochester Hills

# Winter Maintenance Policy

#### Purpose:

To provide a safe roadway system during the winter months by operating effective winter road maintenance services.



#### Priorities:

The City of Rochester Hills has identified three levels of snow and ice control priorities for Major and Local streets.

The priorities are classified by monitoring the Doppler radar forecast and by employee observations of actual road conditions. Additional information on road conditions is provided by the Oakland County Sheriff's Department. The priorities include the following categories.

# Category 1 Snowfall of less than 4 inches

#### **EMERGENCY**

ROUTES – 38 miles of major streets that are traveled by emergency vehicles. These streets are plowed and salted on a 24 hour/7day basis as needed.

#### Category 2 Snowfall of 4 or more inches

EMERGENCY ROUTES - 38 miles of major streets that are traveled by emergency vehicles. These streets are plowed and salted on a 24 hour/7day basis as needed.

LOCAL ROADS – 222 miles of local streets are plowed and salted on an as-needed basis 24 hours a day 7 days a week. When plowing local roads, the city is divided into six plow routes. The routes begin on the East and West sides of the city and progress towards the middle based on traffic counts.

# Category 3 Snowfall of more than 8 inches

EMERGENCY ROUTES – 38 miles of major streets that are traveled by emergency vehicles. These streets are plowed and salted on a 24 hour/7day basis as needed.

LOCAL ROADS – 222 miles of local streets are plowed and salted on an as-needed basis 24 hours a day 7 days a week. When plowing local roads, the city is divided into six plow routes. The routes begin on the East and West sides of the city and progress towards the middle based on traffic counts.

#### Goals:

- Following a significant snowstorm (4 or more inches in a 24 hour period), plow all local streets within 48 hours recognizing that each step will require more time to complete depending on the severity of the storm.
- Apply de-icing chemical as needed to maintain roads in a passable condition.
- Clear pedestrian pathways after all local roads are plowed.
- Maintain school cross walk intersections on overtime basis, however other pathways will not be cleared on overtime.

#### Communications:

The City of Rochester Hills will receive information and comments from the public at the following telephone number: 248-656-4685.

## Winter Weather Emergency Policy

Please note: In accordance with City
Ordinance 98-108, the Mayor has the
authority to declare a "Winter Weather
Emergency" should weather conditions
warrant. During a winter weather emergency,
all vehicles must be removed from city streets
to allow snow plow vehicles to clear our
streets as safely, quickly, and completely as
possible.

Should the Mayor deem it necessary to declare a snow emergency, residents will be notified via Rochester Hills Cable Channel 55/10, the City of Rochester Hills website, local television and radio stations; and, if time allows, a press release will be published in local newspapers.

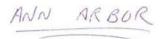
Ordinance 98-108 can be found on the city's website at www.rochesterhills.org.

If you would like additional information, please contact the Mayor's Office at 248-656-4664.

During winter months, the Department of Public Services is responsible for clearing snow on 222 miles of Local Roads and 38 miles of City Major Roads. The City also maintains (by contract with the Road Commission of Oakland County) Livernois from South Boulevard to Tienken. The Road Commission maintains most other major roads. Department of Public Services winter maintenance work crews are assembled from various departments within the City including Local and Major Roads, Sewer Department, Water Department and Drains. In emergency situations, Parks and Engineering employees will also participate in snow removal activities.

Objectives for Winter Maintenance Operations

- Reduce the danger associated with snowy and icy road conditions.
- Prioritize the school bus and industrial routes
- Support emergency operations for the Police and Fire Departments.
- Provide cost effective and fiscally sound use of winter maintenance funds.
- Promote better communications with adjoining communities and road agencies to provide information of the conditions of road surfaces.



government services news contact us living in visiting (Verkling in

Home > Government > Public Services > Field Operations > Snow Removal



Field Operations

Natural Area Preservation

Solid Waste and Recycling

Street Maintenance Services Potholes

Fall Leaf Collection

Snow Removal

Forestry

Park Operations

Field Services

Sidewalk Inspections

Field Operations Staff Directory

Adopt-A-Park

Select Department

Select Online Service

#### Snow Removal

#### Street Snow Plowing Status during significant snow events

The City of Ann Arbor performs a variety of street maintenance depending upon the amount of snow that falls. Generally, the categories are described as "light snow," "snow emergency." In addition, the city is dependent upon its citizens for sidewalk snow removal.

For up-to-date snow information, please watch Cable Television Network (CTN) Channel 16.

Light Snow: Street Cleaning

When there is light snow or ice on road surfaces, the city's Public Services Area clears over 94 miles of high volume streets, bridges, intersections with stop signs or traffic signals, and streets with curves. De-icing materials are applied to provide better traction for vehicles to help prevent accidents at high-risk locations. The street clearing process takes about five hours and may be repeated as needed. After the major and high risk streets are cleared, city crews de-ice the local streets in the city, which requires ten to twelve hours.

**Snow Emergencies** 

When a snowfall of four inches or more occurs, street snow plowing begins and the City Administrator may declare that a "snow emergency" is in effect. Plowing is done on all public streets and city-owned property; however, all schools and privately owned areas provide for their own de-icing and plowing. Citizens are advised to remove cars from curbside parking to allow for effective street plowing.

When a "snow emergency" is in effect, illegally parked vehicles may be ticketed and towed.

The city snow desk is staffed when a snow emergency is in effect. The snow desk tracks the location of plows throughout the City and provides information to the public about the plowing progress. You may reach the snow desk at 994-2359.

On days having odd-numbered dates, vehicles are prohibited from parking on the side of the street having even-numbered street addresses – in order to allow plows to clear the even-numbered side of the street. Parking is permitted on the side of the street with odd-numbered addresses in legal spaces.

On days having even-numbered dates, vehicles are prohibited from parking on the street having odd-numbered street addresses - in order to allow plows to clear the odd-numbered side of the street. Parking is permitted on the side of the street with even-numbered addresses in legal spaces.

#### Sidewalk Snow Removal Information

During the winter, the city provides residents with up to one, 5-gallon bucket's worth of a sand and salt mixture, per visit to the maintenance yard, 721 N. Main, (734) 994-1617. Residents should bring their own shovel and bucket and self-load this material from the marked pile located next to the entrance gate. This material is intended for city residents only, and not for contractors, even if servicing sidewalks. The pure salt stored in the barn is restricted for city operations.

Go to the top

snow removal e-mail updates.

Sign up to receive

Fact Sheet on White Snow Green Streets City Snow Removal Policies

Street Snow Plowing Status during significant snow events

Washtenaw County Road Commission Winter Safety Tips (pdf)

Privacy Policy | Accessibility Features | Help | Sitemap | Email WebMaster