

CITY OF KNOXVILLE
PUBLIC SERVICE DEPARTMENT
SNOW PLAN
INFORMATION GUIDE



Winter 2011/2012

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SNOW & ICE REMOVAL PLAN

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General Guidelines

The goal of Public Service is to clear or remove snow and ice from major and connector streets, exposing bare pavement and permitting the safe and orderly flow of traffic. This allows residents to travel to and from work and facilitates movement by emergency services such as Police, Fire and EMS. The priority of clearing major streets and connector streets assures traffic movement on the most heavily used streets.

Administrative Guidelines

Public Service (PSD) is the department assigned the responsibility for planning and administering the Snow and Ice Removal Plan for the City of Knoxville.

The operational components of the plan, personnel and equipment, are provided by PSD's Street Services and Construction units. A predetermined route is assigned to each unit with the Manager designating personnel and equipment to be used to accomplish the assigned task.

The PSD uses multiple weather forecasting tools, including the local Emergency Management Agency, the National Weather Service and local meteorologists for assistance in predicting snowfall and accumulations.

Personnel from the PSD monitor all snow operations from the command center located at 1400 Loraine Street. Close radio contact is maintained with all operators to keep abreast of progress on the routes and to dispatch backup equipment when problems are encountered. A status board is maintained to monitor all field operations.

Operational Guidelines

If a snowstorm is imminent, the Director, Deputy Director and/or Operations Manager of Public Service will make the decision if/when to implement Stage I operations (applying salt brine). Stage I operations will begin 24-48 prior to the snowfall. All necessary personnel needed for Brine operation will be contacted.

The decision to muster crews for the snow and ice removal operation (Stage II Operations) will be made by the Director or his/her designee based on weather conditions at the time of the storm and forecasts for the storm's duration. When this occurs, the Snow Coordinator will call all Managers of snow removal crews, the Warehouse Manager and the Fleet Services Shop Foremen. If the call comes after regular work hours, these Managers will contact personnel before leaving home.

The routes designated as Level I are to be handled before all other assignments. Only after equipment has been assigned to complete the Level I routes can any equipment be assigned to the Level II routes. Only after Level I and Level II streets are completed will trucks be assigned to trouble spots and Level III streets.

Upon receiving a firm prediction of two or more inches of snow, the Snow Coordinator will alert all Managers to mount plows. The decision to begin using the plows will be made based on the temperature, the rate of snow accumulation, street conditions and a discussion among Managers in the field.

To load salt, drivers will form a line to the salt bins by passing through the gate on the east side of the heavy equipment parking lot. This allows for one-way, westbound traffic from the salt bins to the calcium chloride wetting station and toward the exit gate.

Upon completion of each snow event, all equipment must be cleaned and serviced properly to avoid corrosion of equipment.

The City of Knoxville's Public Service Department has up to 180 employees and 21 pieces of equipment available to clear streets and support emergency services (fire / police / EMS). The Public Service Department uses the following materials/resources to clear streets during an event:

- **Brine** - liquid mixture of rock salt and water that is used to pre-treat roads prior to a snow storm. Distributing the brine solution uses 23 tons of salt to treat the Level I and II streets. Brine is to prevent the bond of ice or snow to the roadway. It also lowers the freezing point of water.
- **Salt** - dissolved salt adds foreign particles into water causing "freezing point depression" and improved melting.
- **Calcium Chloride** - highly affective chemical agent used with salt to increase the melting process even at extremely low temperatures.
- **Plowing** – truck mounted plows are used to move large volumes of snow from primary travel lanes to the edge or side of the street. Plows are very effective during heavy snow events but have little use during light dustings up to an inch or two of snow.
- **Sand/Aggregates** – fine aggregates do little to directly affect the melting process, but sand placed on top of ice and snow adds friction/traction for vehicles and pedestrians. Dark sands will absorb sun light, providing some thermal benefits for melting.

- Potassium Acetate– Liquid agent used as a chemical snow melt. This product is used for the Gay Street due to it being less corrosive on the bridge.

Priorities

Streets are prioritized on the basis of traffic counts provided by the Department of Engineering and Metropolitan Planning Commission. Each street is designed Level I, II (including trouble spots) or III to indicate the priority of treating them with salt and liquid calcium chloride.

Level I Main streets carrying the highest volume of traffic and Hospital Routes
(For a list of streets, see page 8-9)

The routes designated as Level I are to be handled before all other assignments. Only after equipment has been assigned to complete the Level I routes can any equipment be assigned to the Level II routes. In all cases, available equipment will be assigned to Level I routes before being assigned elsewhere.

Level II Streets connecting the main streets, feeder streets to connector streets, trouble spots and hills
(For a list of streets, see page 12-18)

The routes designated as Level II will be handled as soon as level I routes are completed.

Level III Streets providing access to neighborhoods and main connections at the neighborhood level*

(For a list of streets, see page 17-18)

The routes designated as Level III will be handled as soon as level I & II routes are completed and there is no longer a threat of future inclement weather.

*The decision and ability of the Public Service Department to clear Level III routes is based on a number of factors including current weather conditions, salt/chemical reserves and the threat of additional inclement weather.

The Gay Street Bridge

Due to the renovation and closure of the Henley Street Bridge, the Public Service Department will make every attempt to keep the Gay Street Bridge open and safe for traffic. In the past, the City has temporarily closed the Gay Street Bridge to avoid using salt that is corrosive to steel. To facilitate traffic flow during the Henley closure, Public Service will coordinate with the local TDOT office and will be using when feasible, a special melting agent that is less corrosive to the bridge but still effective. The product recommended by TDOT is Potassium Acetate. If Potassium Acetate is not available, then brine and rock will be used to keep this key access route to downtown and South Knoxville open.

LEVEL I STREETS

Organ	Street Name	Location - from and to	mi
3174	Broadway (SR)	E Summit Hill to Foley	7.2
3124	Chapman Hwy (SR)	E Summit Hill to city limits	7
3175	Clinton Hwy (SR)	I-275/I-640 to Callahan	3.3
3172	Dandridge Av	MLK - Brooks - Boyds Bridge to city limits	3
3124	E Summit Hill Dr	Henley to MLK	1.1
3124	Ed Shouse Dr	Middlebrook to Western	.6
3176	Gallaher View Rd	Middlebrook Pk to Gleason Rd	2
3171	Hall of Fame	Hill Av to Broadway	2.5
3171	James White Pkwy (SR)	I-40 to Moody	3.2
3124	Kingston Pk (SR)	Henley to Lovell	13.6
3173	Magnolia/Asheville (SR)	Gay to Brakebill	9.3
3172	Martin Mill Pk	Chapman Hwy to city limits	2.2
3124	Middlebrook Pk (SR)	Western to city limits	9.5
3172	Maryville Pk (SR)/ Moody Av	JWP to city limits	3

LEVEL I STREETS

Organ	Street Name	Location - from and to	mi
3176	Morrell Rd	Kingston Pk to Northshore	2
3171	Neyland Dr (SR)	Kingston Pk to JWP	2.5
3124	Northshore Dr (SR)	Papermill to city limits	2.5
3175	Pleasant Ridge Rd	Liberty across Sanderson to city limits	5.7
3173	Rutledge Pk (SR)	Magnolia to Cement Plant	2
3173	Tazewell Pk (SR)	Broadway to Luttrell	2.2
3124	Western Av (SR)	E Summit Hill to Schaad	7
3176	Baptist Hospital West	Parkside Dr at Turkey Creek	.5
3171	Children's Hospital Ft Sanders Hosp	17th: Western to Cumberland; Highland: 17th to 22nd; 19th & 21st	2
3176	Park West Hospital	Cedar Bluff to Sherrill at Park West	1.5
3174	St Mary's Hospital	I-75/Woodland to St Mary's & side streets	2
3171	UT Hospital	Ramps at Alcoa Hwy	.5

LEVEL II STREETS (Alphabetical Order)

Street Name	Location from and to
21st Street	Western to Middlebrook
Adair Dr	Bruhin to Broadway
Ailor Av	Western to 21st
Alice Bell Rd	Buffat Mill to Washington Pk
Amherst Rd	Middlebrook to city limits
Ault Rd	Rutledge to Buffat Mill
Avenue A	Martin Mill onto Simms onto Day Lily
Beaumont Av	Western thru W Baxter
Beverly Rd	Tazewell to Greenway
Blount Av	Chapman to Sevier
Bradshaw Garden Rd	Pleasant Ridge to Clinton Hwy
Breda Dr	Bruhin thru the Hauge bridge
Bridgewater Rd	Cross Park to Kingston Pk
Bruhin Rd	E Inskip to Heiskell
Buffat Mill Rd	Whittle Springs to Love's Creek
Callahan Rd	from Central Av Pk to Clinton Hwy
Cecil Av	Broadway thru Wilderness to Antietam
Cedar Ln	Broadway to Central Avenue Pike

LEVEL II STREETS (Alphabetical Order)

Street Name	Location from and to
Central Av Pk	Bruhin to Callahan
Cherokee Trail/Scottish Pk	UT Hospital to Maryville Pk
Church Av	Henley to Howard H Baker
Coleman Rd	Papermill to Lonas
Concord St	Sutherland to Kingston Pk
Cross Park Dr	Cedar Bluff to Bridgewater
Dale Av	Alcoa Hwy ramps to Western
Deane Hill Dr	Morrell to Kingston Pk
Delrose Dr	Riverside to Boyd's Bridge
Division St	Sutherland to Liberty
Downtown West Bv	Kingston Pk to Gleason
Dry Gap Pk	Central Av to Rifle Range
Dutch Valley Dr	Old Broadway to Bruhin
E Inskip Rd	Inskip to railroad tracks
E Weisgarber Rd	Papermill to Middlebrook
Eddington Rd	Cherokee Tr to Maryville Pk
Essary Rd	Broadway to Briar Cliff
Fairmont Bv	Broadway to Whittle Springs

LEVEL II STREETS (Alphabetical)

Street Name	Location from and to
Francis Rd	Middlebrook to Helmbolt
Gap Rd	Ohio to Wilson
Gay St	W Fifth to Blount
Gleason Dr	Morrell to Gallaher View
Greenway Dr	Broadway to Washington
Heiskell Av	N Central to Texas
Helmbolt Rd	Francis to Piney Grove Church
Hill Av	Henley to Summit
Hinton Dr	Western to Third Creek
Hollywood Dr	Lonas to Sutherland
Holston Hills Rd	Chilhowee to Boyd's Bridge
I-40 Frontal Roads	Bridgewater to Gallaher View
Inskip Rd	Cedar to E Inskip
Jacksboro Pk	Broadway to Tazewell Pk
John May Rd	Western to Wood Smith
Johnston St	Heiskell to Tennessee
Keith Av	Western to Sanderson
Liberty St	Middlebrook to Sutherland
Locust St	Summit Hill to Neyland

LEVEL II STREETS (Alphabetical)

Street Name	Location from and to
Lonas Dr	Middlebrook to E Weisgarber
Love's Creek Rd	Millertown to Rutledge
Lovell Rd	Kingston Pk to I-40
Lyon's View Dr	Kingston Pk to Northshore
Lyons's Bend Rd	Northshore to city limits
Main St	Henley to State
Mall Rd N & S	Washington to Millertown
Martin Luther King Bv	Dandridge to Asheville
McDonald Rd	Brooks to Sunset
McKamey Rd	Western to city limits
Merchant Dr	Central Av Pk to Pleasant Ridge
Millertown Pk	Washington to bridge past Love's Crk
Montvue Rd	Kingston Pk to Gleason
Murray Rd	Wilkerson to Central Av Pk
N & S Central Av	Woodland to E Hill
N Central Av	Broadway to Heiskell
N Cherry St	MLK to Cecil
N Chilhowee Dr	Rutledge to Asheville
Neubert Springs Rd	W Martin Mill to city limits

LEVEL II STREETS (Alphabetical)

Street Name	Location from and to
Nickle Rd	Western to Sullivan
Old Broadway	Broadway to Broadway
Papermill Rd	Kingston Pk to Liberty
Parkdale Rd	Cedar to Rifle Range
Peters Rd/Parkside Rd	Kingston Pk to city limits
Plummer Rd	Adair to Dutch Valley
Proctor St	Western to Middlebrook
Prosser Rd	Buffat Mill to Rutledge
Riverside Dr	Connector to Delrose
S Gallaher View Rd	Gleason to I-40
Sevier Av	Gay St Brdg -Hillwood to
Sullivan Rd	Western to Pleasant Ridge
Sutherland Av	Middlebrook to Hollywood
Sutherland Av	Hollywood to Westwood to Kingston Pk
Texas Av	Heiskell to Western Av
Third Creek Rd	Hinton to Middlebrook
Tillery Rd	Bradshaw Garden to Central Av Pk
University Av	Western to W Fifth
Valley View Dr	Whittle Springs to Washington Pk

LEVEL II STREETS (Alphabetical)

Street Name	Location from and to
Vanosdale Rd	Middlebrook to Buckingham to Kingston Pk
W Baxter Av	Beaumont to Central
W Blount Av	Maryville Pk to Woodland
W Fifth Av	University to Hall of Fame
W Inskip Dr	Railroad tracks to Clinton
W Young High Pk	Chapman to W Martin Mill
Walnut St	Neyland to Summit Hill
Washington Pk	Broadway to Mills
Westfield Dr	Kingston Pk to Papermill
Westland Dr	Northshore to Morrell
Whittle Springs Rd	Cecil to Broadway
Wilson Rd	Pleasant Ridge to Gap
Woods Smith Rd	Western to McKamey

Common trouble spot locations to be completed after Level II

Broome Rd hills and narrow lanes

Cherokee Trail route to hospital

Dandridge Av at bridge

Dewine St hills

E Red Bud Dr hill at Chapman Hwy

Elm St hills at W Oldham

Fern St hills

Grove Dr hills at Rifle Range

Harvey St hills from Woodland to Oglewood

Haynes-Sterchi hills at Cedar Ln/Dry Gap

Hillwood Dr hill/bridge to nursing home

Holston Dr bus route

Holston Dr hills at nursing home

Hotel Av hill from Broadway to Holbrook

John May Rd hill

Lippencott St hill at UT student apts.

Locust St at Neyland Dr

N Winston Rd at bridge

Nickle Rd curves and hills

Piney Grove Church Rd narrow & curvy

Sharp's Ridge hills

Sheffield Dr hill at Vanosdale

Skyline Dr hills

Springhill Rd hills

Sullivan Rd curves and hills

Tobler Ln hill at Kingston Pk

Woodlawn Av hill at Chapman

Level III streets alphabetical

Street Name	Street Name
11th St	Coster Rd
16th St	Cruze Rd
22nd St	Davenport Rd
Anita Dr	Dewine Rd
Arrowhead Tr	Dick Lonas Rd
Atlantic Av	E Fifth Av
Ball Camp Pk	E Glenwood Av
Beaman Lake Rd	E Morelia Av
Ben Hur Av	E Quincy Av
Bennington Dr	Elm St
Biddle St	Essary Rd
Blow's Ferry Rd	Fairway Dr
Booker St	Fox Lonas Rd
Bridgewater Rd	Garden Dr
Briercliff Rd	Highland Av
Cecil Johnson Rd	Highland Dr
Cherokee Bv	Holston Dr
Cheshire Dr	Holston Hills Rd
Clinch Av	Island Hills Rd
College St	Jackson Rd
Colonial Dr	Jenkins Rd
Corteland Dr	Jessamine St

Level III streets alphabetical

Street Name	Street Name
Jim Sterchi Rd	Schubert Rd
Knott Rd	Shannondale Rd
Knox Rd	Shea St
Lake Loudon Bv	Sherrill Bv
Lancaster St	Sisk Rd
Lockett Rd	Skyline Dr
Lundy Rd	Springhill Rd
Mabry Hood Rd	Stone Rd
Magazine Rd	Taylor Rd
McCalla Av	Tennessee Av
N Sixth Av	Valley View Dr
North Hills Bv	Villa Rd
North Park Bv	Volunteer Bv
Oglewood Av	W Ford Valley Rd
Oriole Rd	Walker Bv
Palmetto Rd	Walnoaks Rd
Park Village Rd	Washington Av
Pershing St	Wesley Rd
Ray Mears Bv	West Hills Rd
Rennoc Rd	White Oak Dr
Rifle Range Rd	Wilkerson Rd
Robinson Rd	Winona St
Rowan Rd	