SNOW PLAN UPDATE

Winter 2021-2022

Environmental Quality & Public Works Committee
October 19, 2021

LEXINGTON

Presentation Overview

- Snow Season Expense Comparison
- Status of Salt
- Route Rankings
- Service Levels
- Changes to the Snow Plan
- COVID-19 Coordination
- Sidewalk Snow Removal
- Staffing
- Projected Schedule for Plan Finalization

Snow Season Expense Comparison

Fiscal Year	Expense*	Salt used (Tons)	Salt price (per ton)	Mobilizations Full / Partial**
2018	$478,743	10,306	$58.32	12 / 6
2019	$349,028	4,215	$86.44	4/13
2020	$440,706**	1,745	$90.87/92.84	2/6
2021	$930,160	8,038 1,000 (rock)	$68.90/70.90	7/2
2022			$88.99	

** Does not include personnel*
"Typical" winter averages 22 mobilizations per year
*** 7,000 tons loaded into W Hickman Barn 2020*

Full mobilization = All drivers and all supervisors and may include multiple shifts and days.
Partial mobilization = 1 supervisor and 1 driver or fewer per area.

Salt supply

Currently on hand → 8,800 tons

Storage Capacity → 8,800 tons

(1,800 tons at Old Frankfort Pike& 7,000 tons at W Hickman)

FY 2022 budget → $700,000

FY22 salt cost→ $88.99/ ton (In previous year $2/ton more to deliver to W Hickman.)

Route Rankings

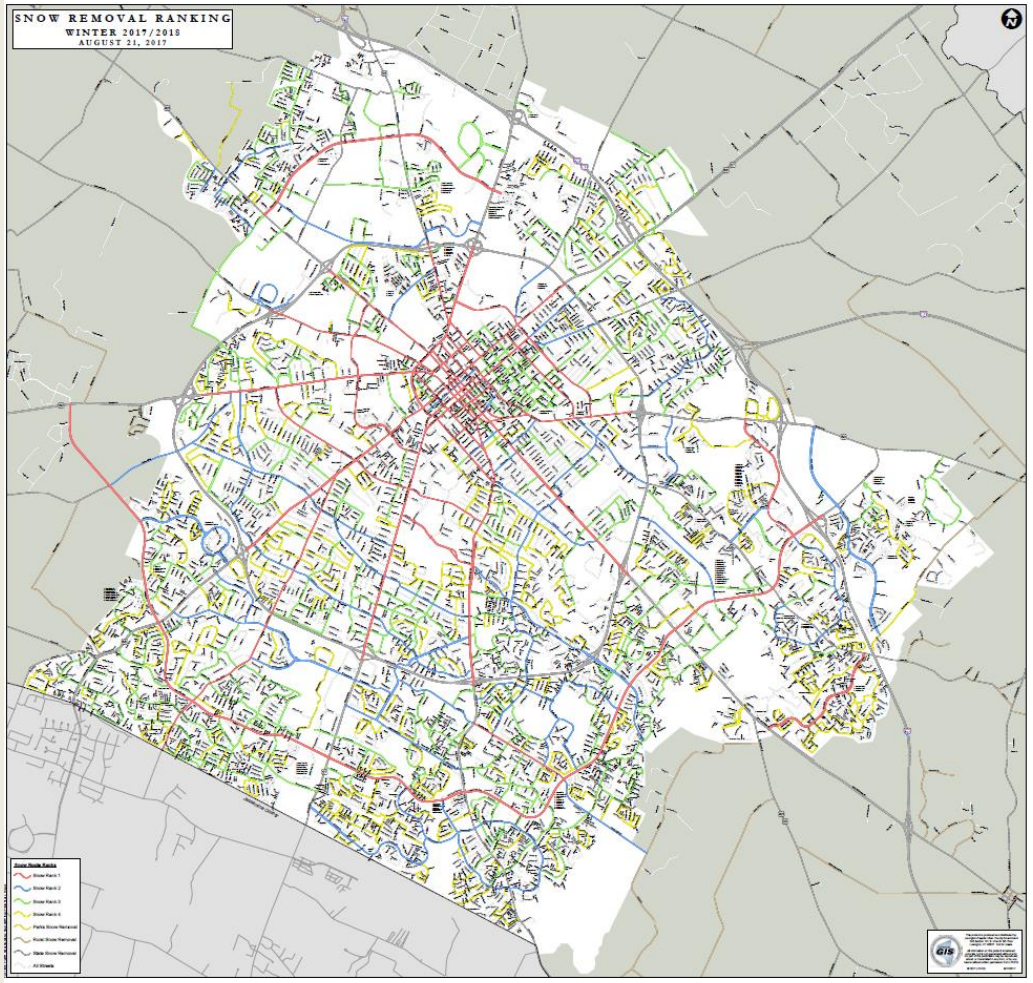
Rank 1 -- primary arteries in and out of the city. (*Nicholasville Rd, Man O' War Blvd, etc.*) 296 lane miles*

Rank 2 -- major connecting streets. (*Lane Allen Rd, Loudon Ave, etc.*) 192 lane miles*

Rank 3 -- collector routes. (*Sandersville Rd, Old Todds Rd, etc.*) 356 lane miles*

Rank 4 -- local residential streets, which allow residents access to the main roads (*Dunkirk Dr, Glendover Rd, etc.*) 330 lane miles*

*lane miles:
1 mile of a 2-lane road = 2 lane-miles



Service Levels

Level 1 → 1” to 4” of accumulation

- Operate under current plan (Rank 1-4 streets)

Level 2 → 5” to 8” of accumulation

- In addition to the Rank 1-4 routes, we will add unranked residential collector streets that connect to collector streets

Level 3 → 8” of accumulation and above

- In addition to the Rank 1-4 streets, we will attempt to plow as many streets as possible

Changes for 2021-22 Snow Season

- Minor edits to reflect connectivity concerns, and school and public safety access.
- Increase pre-wetting of salt to reduce bounce and increase effectiveness.
- Areas 3, 4, 5, 6, 7-F and 9 will report to Brannon Road barn
- Rank 3 and 4 sidewalks may not be plowed in a service level 1 or 2 event.
- Completed sections of Town Branch Commons Trail will be added to the list of ranked sidewalks
- Kept COVID-19 protocols and coordination in place.
- Public access to the snowplow tracker website.

COVID-19 Coordination

- Mutual COVID-19 assistance agreement with KYTC District #7.
- Updated emergency contact information across divisions and stakeholders for rapid internal communication.
- Consensus across divisions and agencies for mutual aid and support in the event of positive tests.
- Commissioner will serve as coordinator of rapid staff reallocation as needed.
- For 2021-2022, streets providing emergency access to certain critical facilities will have a Rank 1E ranking above Rank 1 should staffing become too limited to execute the traditional plan. Plan in development with UK and DEM.
- Continued emphasis on social distancing, vaccination, and disinfection of all surfaces among staff to limit the spread and prevent infection.

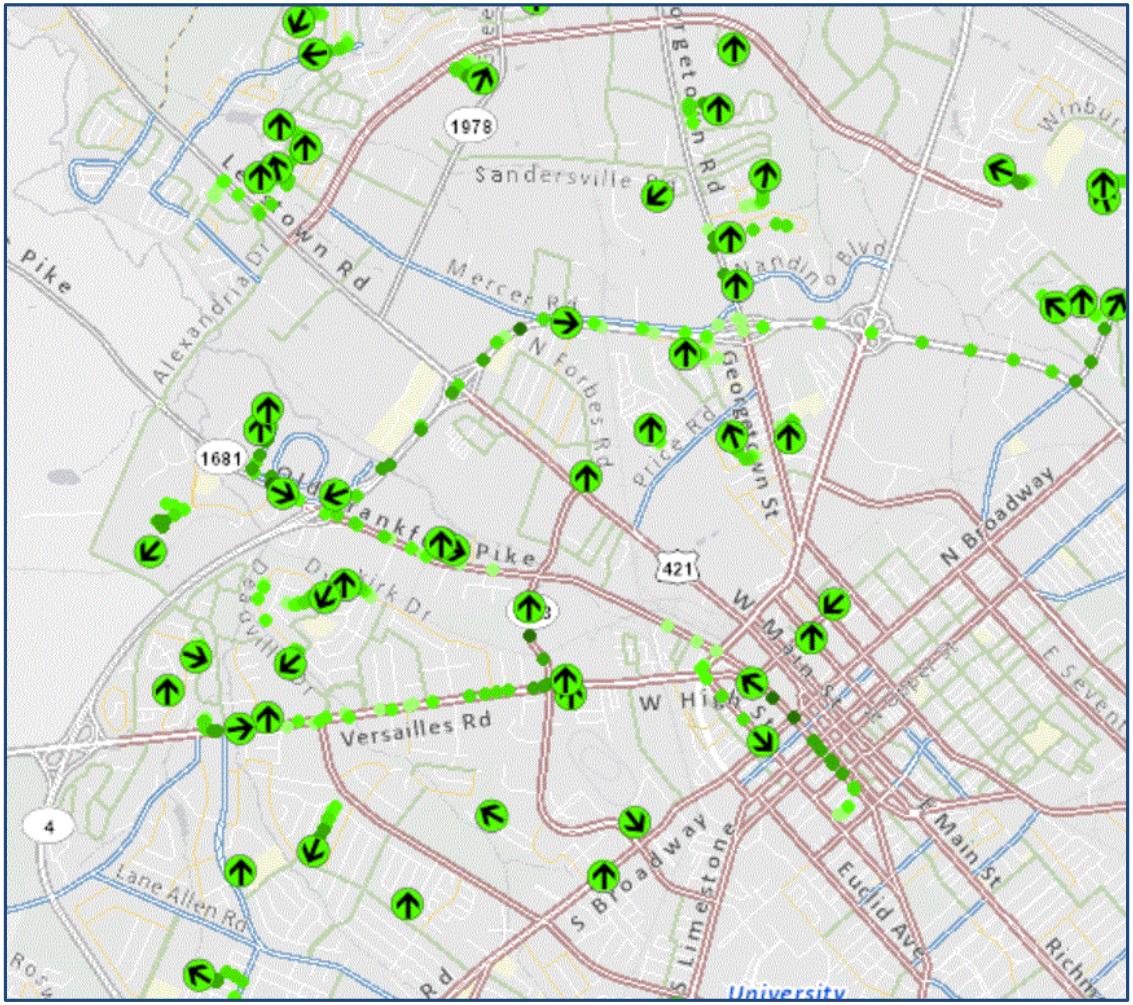
2021-22 Snow Plan

Goals

- Complete Roadway Snow Plan (Rank 1 – 4 routes) within 48 hours of snow end.
- Complete Sidewalk Snow Plan (Rank 1 – 4 routes) within 96 hours of snow end.

Snow Plow Tracker

https://maps.lexingtonky.gov/snowresponse



Legend

Tracking Test

Vehicle Location

Vehicle Trail - 1 minute

Vehicle Trail - 2 minutes

Vehicle Trail - 3 minutes

Vehicle Trail - 4 minutes

Vehicle Trail - 5 minutes

Ranked Snow Routes

Snow Ranking - 72k

Rank 1

Rank 2

Rank 3

Rank 4

Parks Snow Removal

Rural Snow Removal

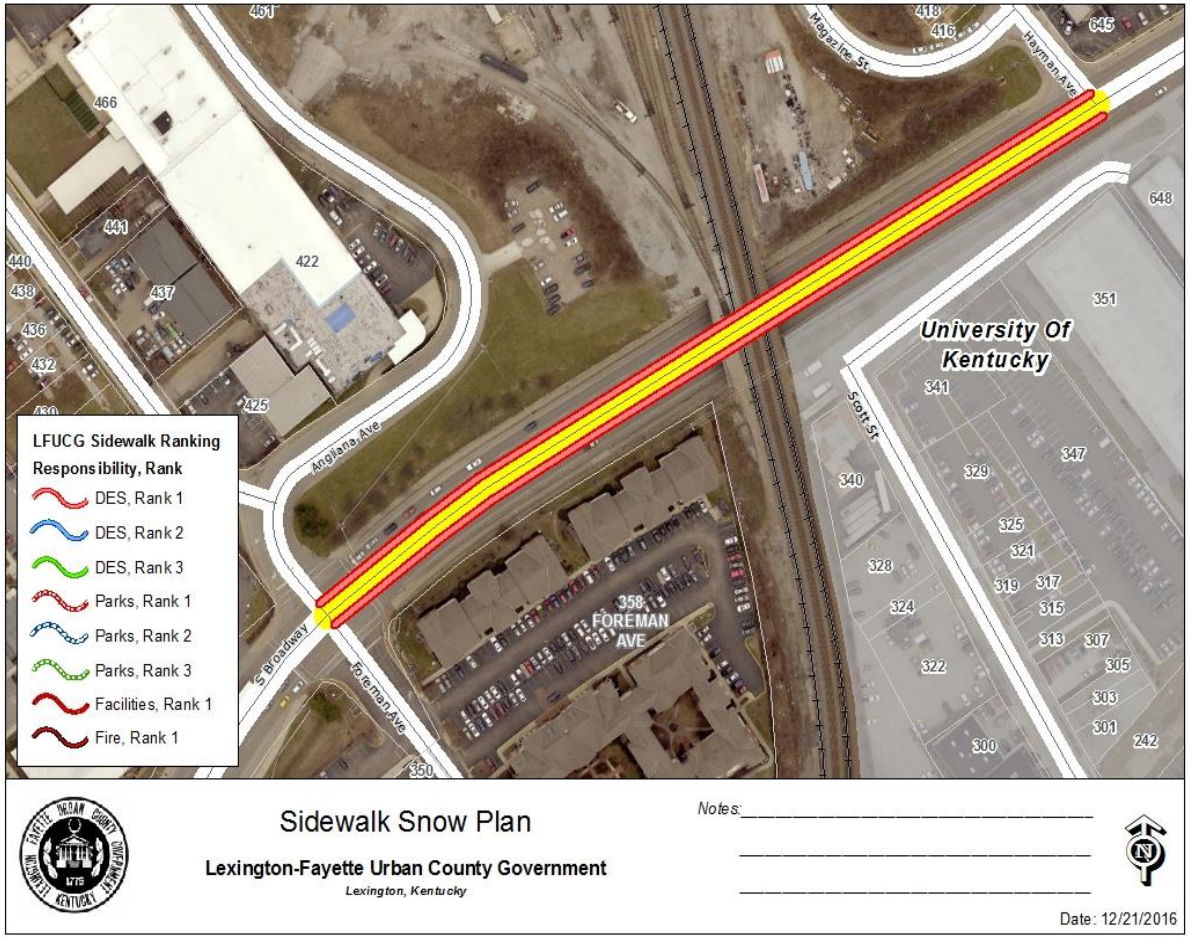
State Snow Removal

Sidewalk Snow Removal

- Primary execution by combined forces of Environmental Services, Parks, and Facilities.
- Over 80 miles of sidewalks serviced with full execution of the plan.



Sidewalk Snow Removal



- Sidewalk clearing begins after snow stops. Must coordinate timing with road crews to minimize re-coverage after clearance.

Sidewalk Snow Removal

Rank examples	Length
Rank 1 • Overpasses and underpasses • City-owned facilities • High density city-maintained sidewalks/crosswalks • Service Open Parks Facilities	12.0 Sidewalk Miles
Rank 2 • Designated city-maintained sidewalks on arterials and collectors in high density areas (i.e., Man O' War, Wellington Way, Wilson Downing, etc.) • Service Closed Parks Facilities & near bus stops • School routes (school closed)	36.2 Sidewalk Miles
Rank 3 • Perimeter sidewalks of Parks - High density areas	15.9 Sidewalk Miles
Rank 4 • City-owned parcels in lower density residential areas (WQ lots, greenways); • Perimeter sidewalks of Parks - Low density areas	16.9 Sidewalk Miles

Staffing

Streets and Roads -- authorized strength: 68 CDL positions.

Water Quality – authorized strength: 29 CDL positions. Not all available to drive at the same time in case of sewer line breaks.

Environmental Services -- 7 positions operating equipment and/or shovels, including two backup drivers for clearing LFUCG maintained sidewalks.

Other – additional drivers from Water Quality, Parks, Waste Management and Environmental Services (if needed).

Plan Finalization Schedule

Stakeholder Meeting – September 09, 2021
(LexTran, FCPS, state, etc.)

EQ&PW Committee Update – October 19, 2021

Post to Webpage – October 19, 2021

QUESTIONS / COMMENTS?



