

SNOW PLAN UPDATE

Winter 2020-2021

*Environmental Quality & Public Works Committee
October 06, 2020*



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	\$478,700	10,306	\$58.32	12 / 6
2019	\$349,000	4,215	\$86.44	4 / 13
2020	\$440,876**	1,745	\$90.87/92.84	2/6
2021			\$68.90/70.90	

* 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

Partial mobilization = 1 supervisor and 1 driver per area



Salt supply

Currently on hand → 5,800 tons.

Storage Capacity → 8,800 tons total

(1,800 tons at Old Frankfort Pike & 4,000 tons at W Hickman)

FY 2020 budget → \$350,000

FY20 salt cost → \$89.44/ ton (to Old Frankfort Pike)

\$91.44/ ton (to W Hickman)

FY21 budget -> \$0

FY21 salt cost -> \$68.90 KACO reverse auction price; \$2/ton

increase for delivery 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*

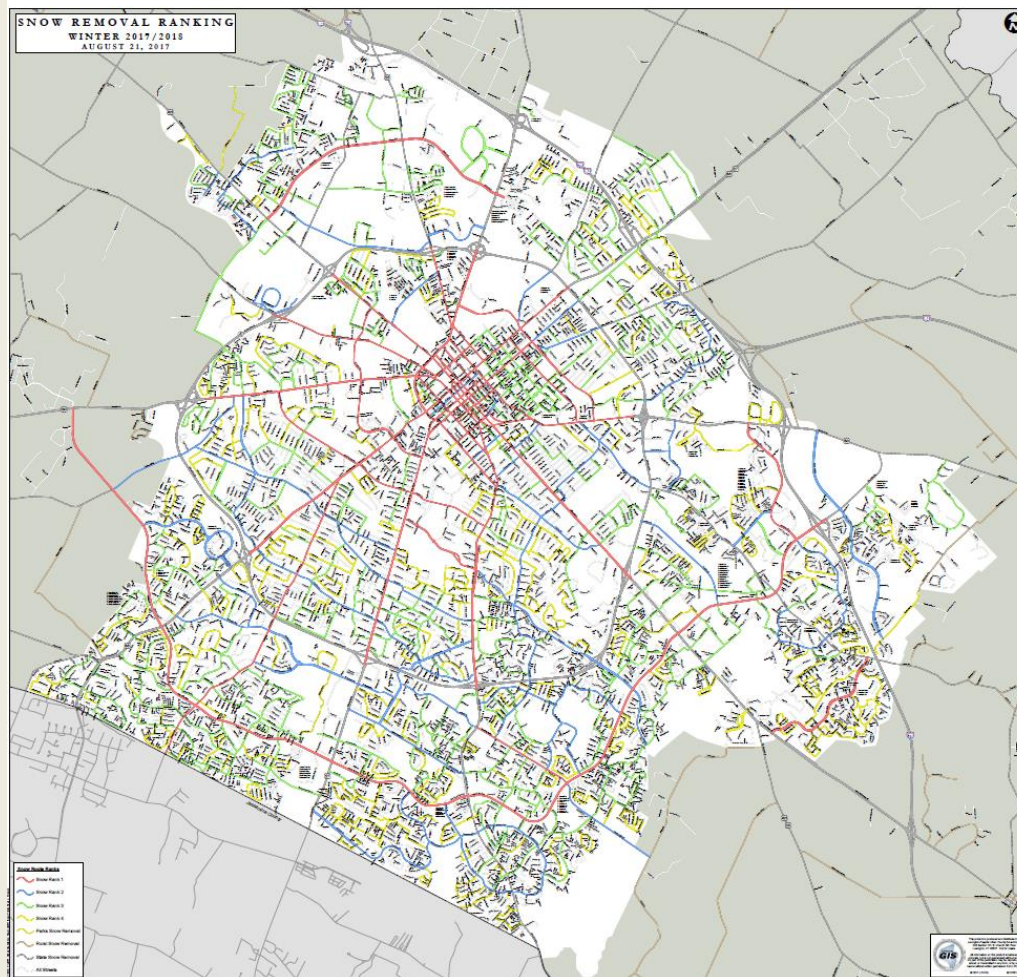
Rank 2 -- major connecting streets. (*Lane Allen Rd, Loudon Ave, etc.*) 192 lane miles*

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 2020-21 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
- In 2019/2020 Added a 4th ranking for sidewalks. These will consist of the lower density facilities on the perimeter of Parks and other city owned property in low traffic residential areas.
- Rank 3 and 4 sidewalks may not be plowed in a service level 1 or 2 event.
- Add COVID-19 rapid coordination efforts

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 for mutual aid and support in the event of a positive test.
- Commissioner will serve as coordinator of rapid staff reallocation as needed.
- For 2020/2021, 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 and disinfection of all surfaces among staff to limit the spread in the event of a positive test.

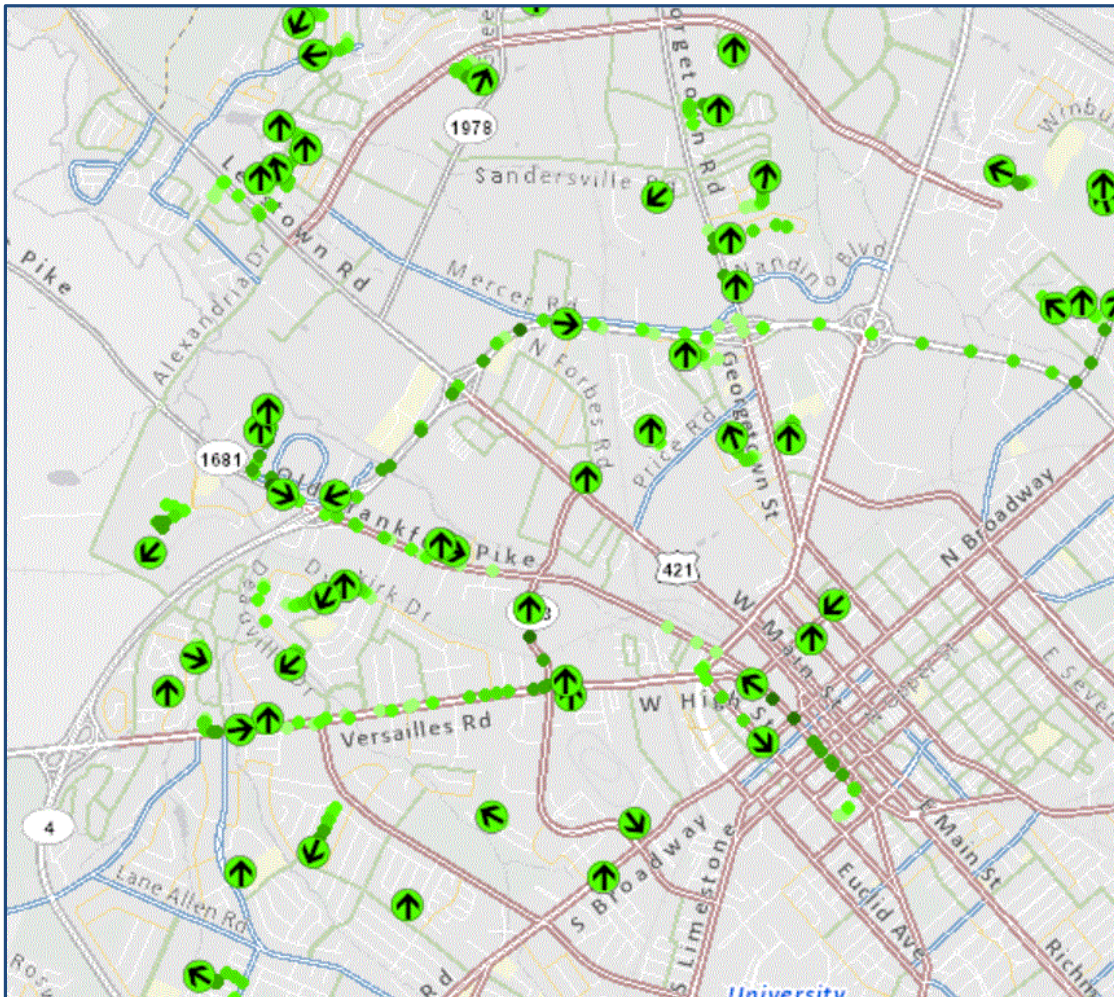
2020-21 Snow Plan

Goals

- Complete Roadway Snow Plan (Rank 1 – 4 routes) within 36 hours of snow end.
- Complete Sidewalk Snow Plan (Ranked 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

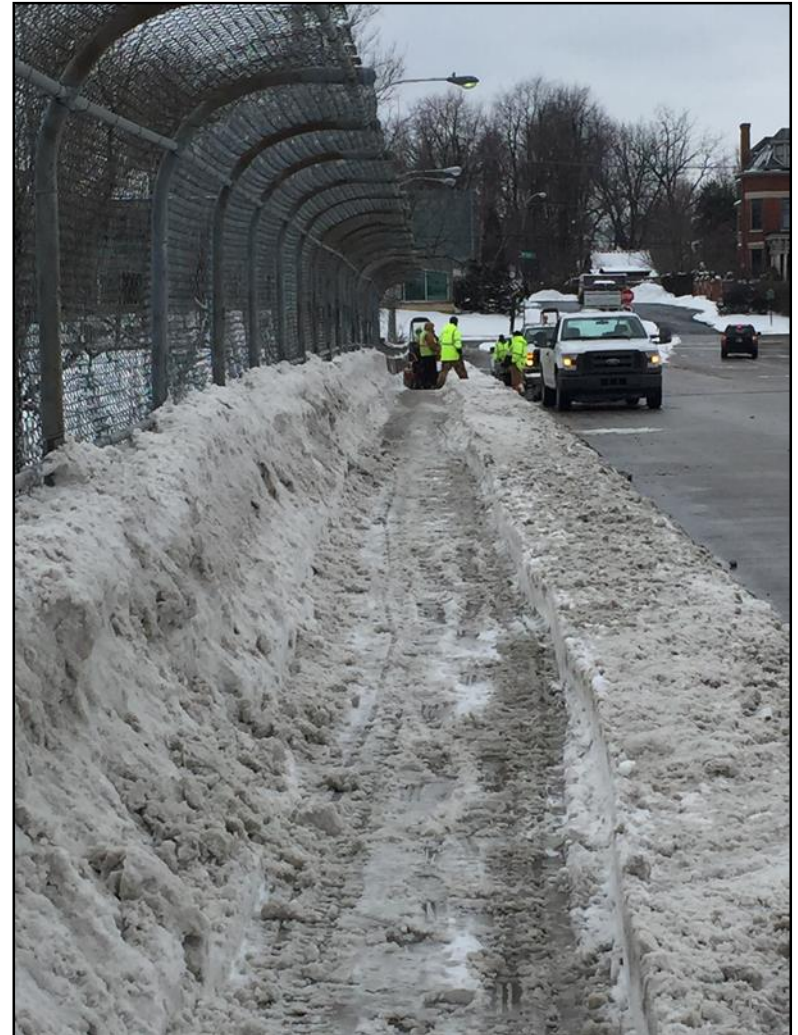
Parks Snow Removal

Rural Snow Removal

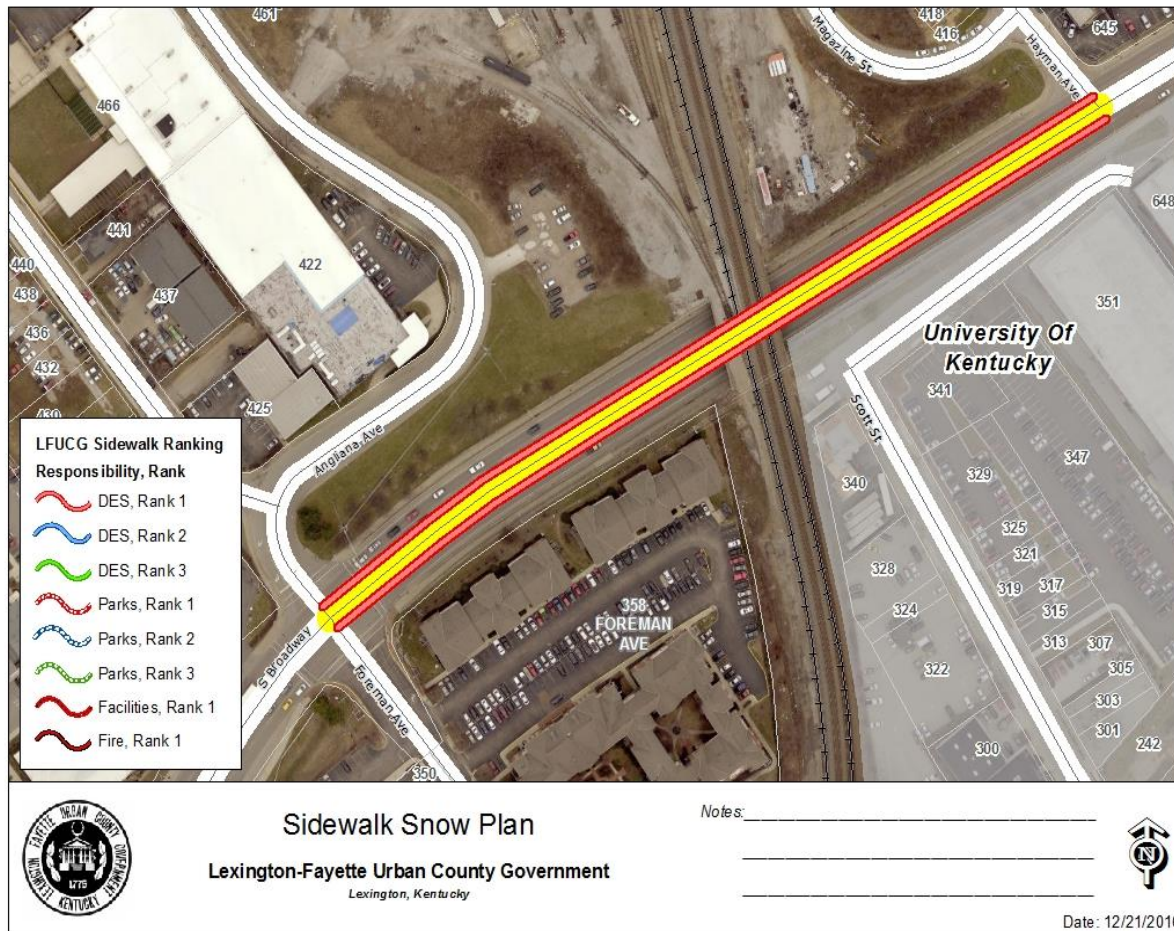
State Snow Removal

Sidewalk Snow Removal

- Primary execution by combined forces of Environmental Services, Parks, and Facilities.
- 81 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.
- When possible we may begin clearing snow downtown before snow ends and revisit during or after the event as well



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: 67 CDL positions.

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

Environmental Services -- 12 to 14 positions operating equipment and/or shovels, including two backup CDL drivers.

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



Plan Finalization Schedule

EQ&PW Committee Update – October 06, 2020

Stakeholder Meeting – September 16, 2020

(LexTran, FCPS, state, etc.)

Post to Webpage – October 30, 2020

QUESTIONS / COMMENTS?

