

SNOW PLAN UPDATE

Winter 2019-2020

*Environmental Quality & Public Works Committee
October 22, 2019*



LEXINGTON

Presentation Overview

- Snow Season Expense Comparison
- Status of Salt
- Route Rankings
- Service Levels
- Changes to the Snow Plan
- 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

** Does not include personnel*

*** "Typical" winter averages 22 mobilizations per year*

Full mobilization = all drivers and all supervisors

Partial mobilization = 1 supervisor and 1 driver per area



Salt supply

Currently on hand → 2,800 tons + 2,000 tons will be loaded into the Brannon Road facility upon completion

Storage Capacity → 8,800 tons total

1,800 tons at Old Frankfort Pike & 7,000 tons at Brannon Road

FY 2020 budget → \$350,000

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

\$91.44/ ton (to Brannon Road)



Route Rankings

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

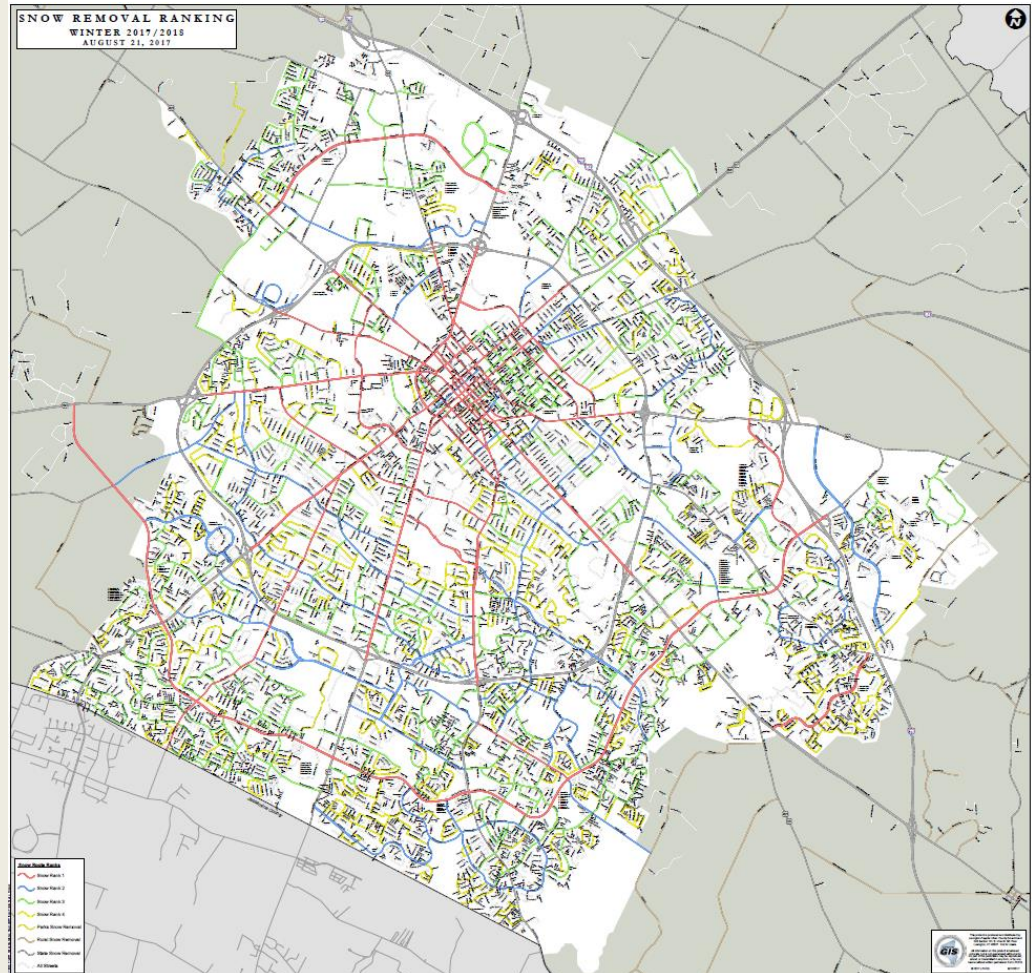
Rank 2 -- major connecting streets. (*Lane Allen Rd, Loudon Ave, etc.*) 192 lane miles*

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 2019-20 Snow Season

- Minor edits to reflect connectivity concerns, and school and public safety access.
- Increase prewetting of salt to reduce bounce and increase effectiveness
- Areas 3, 4, 5, 6, 7-F and 9 will report to Brannon Road barn
- More widespread sharing of the snow plow tracker website information
- 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.



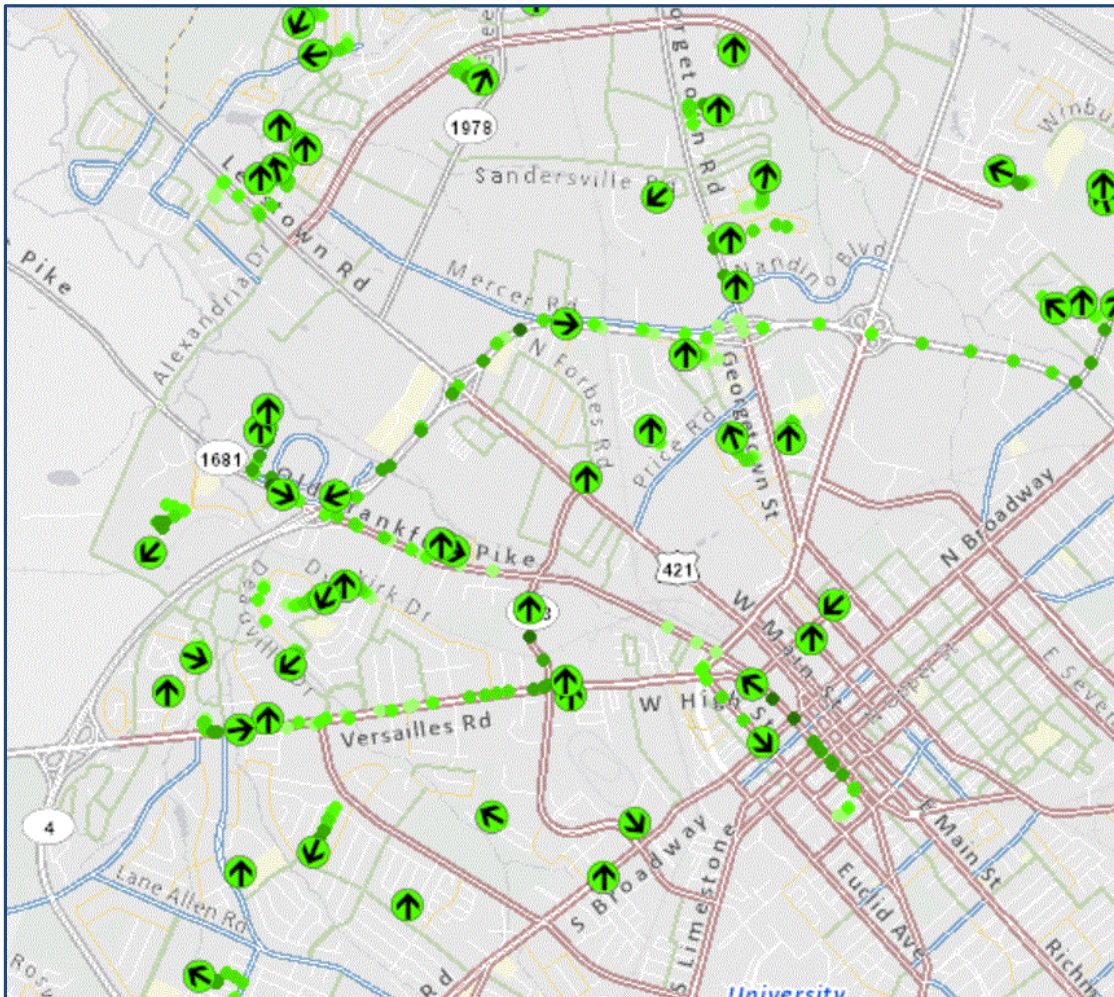
2019-20 Snow Plan

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

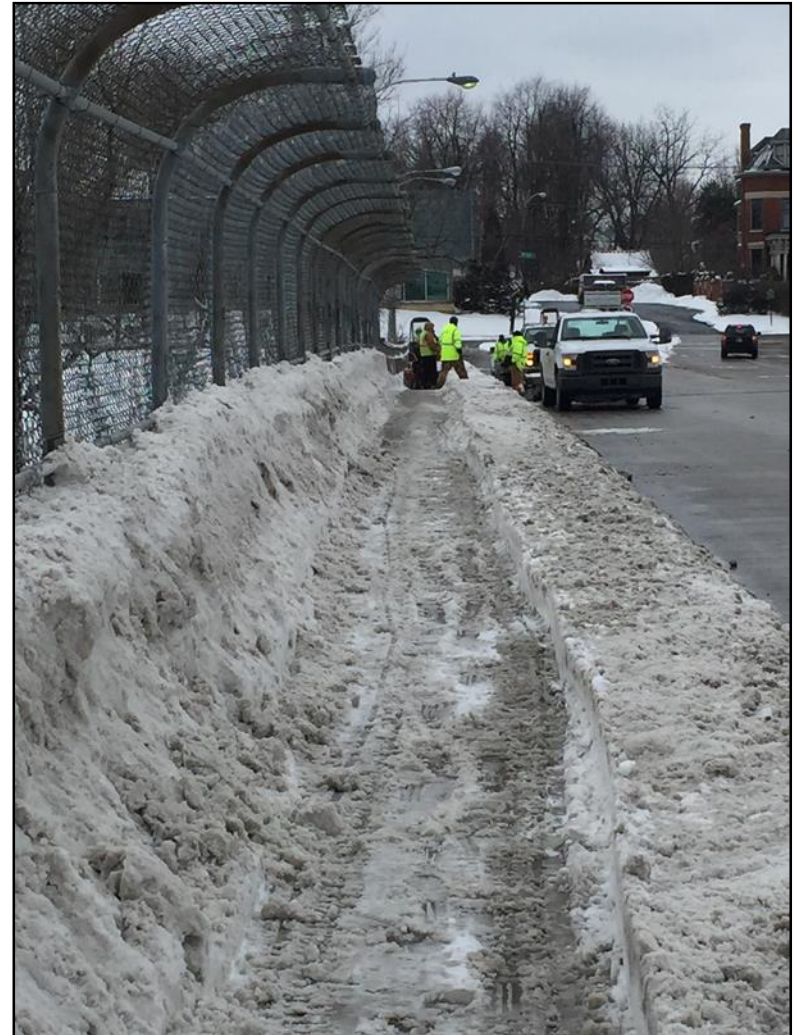
Parks Snow Removal

Rural Snow Removal

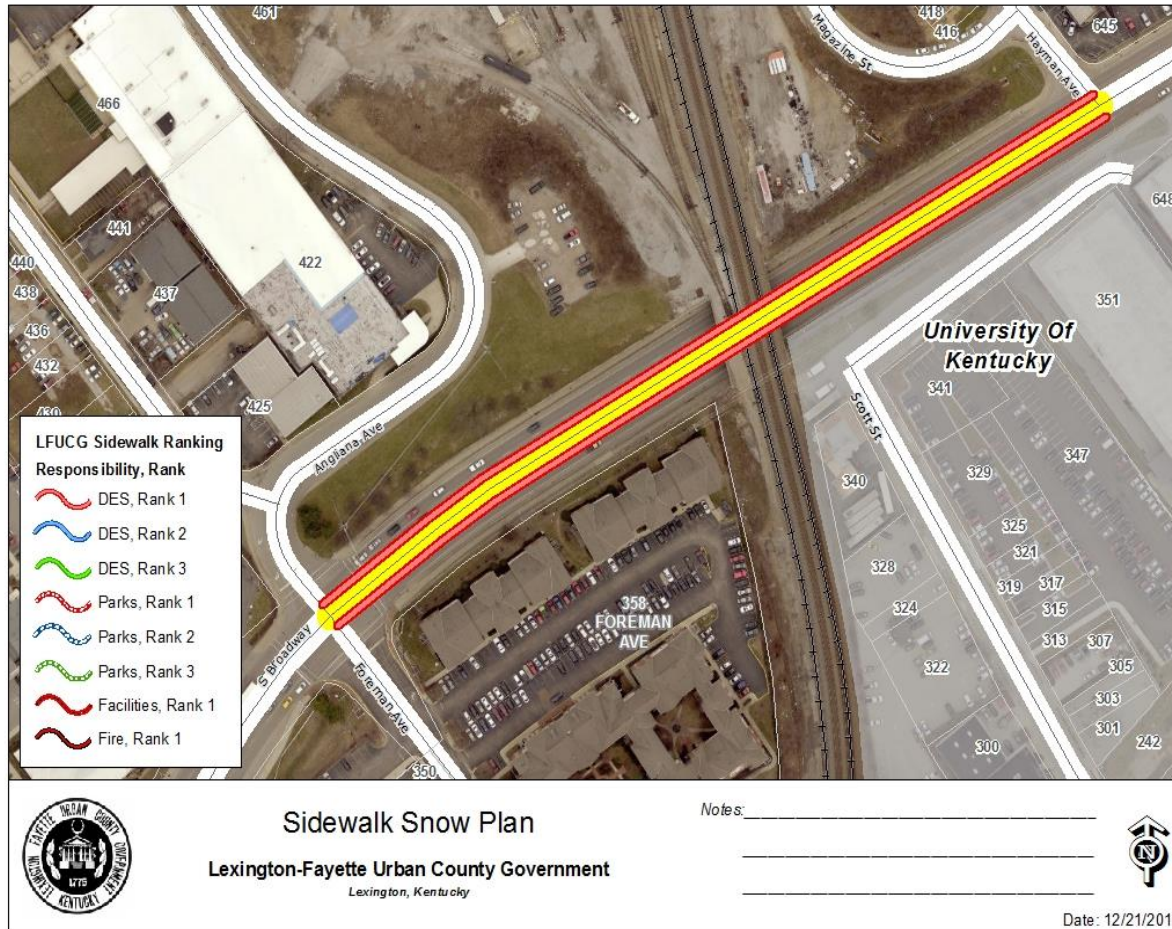
State Snow Removal

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 <ul style="list-style-type: none">• Overpasses and underpasses• City-owned facilities• high density city-maintained sidewalks/crosswalks• Service Open Parks Facilities	12.0 Sidewalk Miles
Rank 2 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• Perimeter sidewalks of Parks - High density areas	15.9 Sidewalk Miles
Rank 4 <ul style="list-style-type: none">• 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 22, 2019

Stakeholder Meeting – September 16, 2019

(LexTran, FCPS, state, etc.)

Post to Webpage – October 30, 2019

QUESTIONS / COMMENTS?

