Snow Solutions Team: 2024-2025 Final Report

Prepared by Municipal Manager Becky Windt Pearson Presented July 15, 2025

The Snow Solutions Team met for the first time on August 26, 2024 to review the challenge of delivering timely, high-quality snow removal services during the 2024-2025 season. The group has meet periodically over the last year, and includes representatives from the following departments: OMB, Municipal Manager, Office of Emergency Management, Human Resources, IT, Parks and Recreation, Public Transportation, Planning, Public Works, Maintenance and Operations, Project Management & Engineering, Traffic Engineering, Real Estate, and Public Finance.

In our initial meeting we brainstormed the following list of ideas to pursue (**bolded** ideas were identified for further follow-up):

- Planning for replacement of contingent contractors used for hauling
- More multi-use grooming
- Quicker ice-skating plowing (not using trucks)
- Is there an option to adapt our level of service when speed is a priority for a plow-out?
- Speedier contract process needed
- Need consistent internal coordination (internal comms plan and meeting structure)
- Point person the public can rely on to share information
- Communicate to the public what they can do to help (don't shovel your snow in the road)
- Need enough snow dumps. Can we explore wetlands properties owned by the MOA which are now legal for development?
- Need a resource to clear out bus stops (more people? Contract labor?)
- Parks does not have a plan or a service-level expectation for areas that it clears
- Snow emergency response plan still needs to be approved
- Need to use "emergency" correctly and determine when we might need one
- GPS on plows
- How can we prevent parking in the way of snow plowing?
- Plows on bikes!

The group then broke out into workstreams to address concrete deliverables. The table below reviews each identified task with the status as of the conclusion of the 2024-25 snow season.

Category	Task	Status
Coordination	Improve ASD coordination: identify "must plow" streets list, improve real-time responsiveness, align snow removal efforts with school closure standard and process	Strong coordination already existed between the operational leads at ASD and at the Municipality. In 2024-25 this was augmented by ongoing, real-time communication between the Municipal Manager and the COO of ASD during all winter weather events. MOA succeeded in responding to parking lot plowing need in real time to enable schools to remain open.
	Improve DOT coordination: address bus stop plow-in issue, identify service expectation level, assess any requisite TORA changes.	Multiple good meetings with ADOT regarding coordination. Bus stop issue discussed but not conclusively solved. Multiple informal service swaps reviewed, no formal TORA changes requested. Need to continue to discuss rationalizing nonmotorized pathway clearance.
	Align MOA efforts with ADP efforts: coordinate timing of plowing efforts, straight-line connection between ADP, brainstorm options to improve downtown snow removal.	Multiple good meetings with ADP regarding communication and coordination of efforts. Strong operational connection has facilitated coordinated efforts.
Planning	Update Snow and Ice Control Plan, with a focus on public communication Draft and publicize Parks and Rec snow and ice control plan	Updated. Online here. Need to set a timeline for annual updates. Plan drafted and complete. Online here. Need to set a timeline for annual updates and link more prominently to muni.org/plow.
	Complete ROW Management Study	Plan still ongoing. Scope undergoing alteration to align more completely with strategic goals. Questions to address may include incorporation of best practices from other jurisdictions and public

		engagement focused on
		budget/service level. Kickoff
		meeting for new scope to be
		scheduled.
Personnel	Add site enhancement PCNs at	Completed.
	Transit	
	Turn one-time operator bonus	Negotiation complete.
	into permanent pay increases for	Administrative Agreement
	operators	approved by the Assembly. Pay
		changes implemented.
Fleet	Accurately track the status of the	Completion of 2022 ACFR
	fleet fund	allowed for purchase of \$3.7M in
		additional snow equipment.
		Each ACFR completion
		enhances accuracy of tracking.
	Pass bond/levy measure to	Passed. 2025 orders complete.
	increase acquisition of snow	Priority list for 2026 has been
	removal equipment	identified; equipment will be
	The state of the s	ordered when funds are
		available.
Budget	Track \$\$ appropriated, how we're	Multiple views of budget created
	spending it, and service level it	by Courtney/Ona.
	produces	
	Produce projected cost of various	Completed. Multiple scenarios
	improvements to level of service	modeled.
Communications	Create unified snow removal	Completed. www.muni.org/plow
Communications	website	The state of the s
	Create single phone # for snow-	Completed. 907-343-PLOW
	related information	(7569) (forwards to Street
		Maintenance).
	Draft and execute winter comms	Completed. Kenny Friendly
	plan	identified as primary
		communicator in this arena. Will
		need to set timing for refresh in
		advance of 2025-26 winter
		season.
	Implement GPS on snow plows	Completed. Can be tracked
		online <u>here</u> .
	Name snow plow fleet	Completed.
Non-Motorized	Workshop current division of	Ongoing. Work needs to be
Transportation	labor between M&O, Parks and	completed.
	Rec, and DOT to determine	
	whether allocation of	

	responsibility can be better	
	rationalized	
	Determine and circulate ADA	Initial opinion issued by legal.
	standard for clearing snow on	Needs to be finalized.
	non-motorized pathways	
	Build a real link between our	Street Maintenance working to
	designation of Safe Routes to	incorporate clearing of more
	School and sidewalks designated	routes designated as Safe
	for clearing	Routes to School. Systematic
		approach still needs to be
		finalized.
	Explore possible equipment	M&O assessed possible use of
	alternatives for non-motorized	John Deere 6120Ms to determine
	pathways (looking to options in	whether they would be a good fit
	use in other winter cities)	for the MOA. Determination is
		that they would not work well for
		us because of their size. M&O
		continuing to look into
		attachments for our Trackless
		equipment which would
		enhance clearing for improved
Emergency	Redraft AMC 24.25 to make it a	use by wheelchair users. Completed.
Snow/Ice Events	more useful tool to invoke in the	Completed.
Show/ice Events	event of heavy snowfall	
	Explore whether there is a	Review completed. "Bad job
	adaptation of our service	faster" would involve not using
	standard which would allow us to	gates and potentially using lanes
	triage road clearance to a	for snow storage. Both options
	functional level more quickly in	built into AMC 24.25 re-write for
	the event of extreme snow	use during a Major Winter
		Weather Event.
Odds and Ends	Explore possibility of pre-ordering	Explored. M&O ordering some
	parts for plows to expedite repair	parts in advance, as appropriate
		(order on 5/20 Assembly
		agenda).
	Explore newly possible snow	Full review of possibilities still
	dump sites after Supreme Court	needs to be completed.
	ruling on use of wetlands	Exploring expansion of Mountain
		View snow dump site.
	Resolve Rockridge Drive issue	Appurtenant properties annexed
	(road w/no appurtenant	via AO. Will continue to explore
	properties included in LRSA).	LRSA re-alignment.

At the conclusion of snow season 2024-25, the following open tasks remain:

- Complete revised ROW Management Study
- Continue work on approach to non-motorized pathways:
 - Reach final decision on whether a rationalization of duties as between Street Maintenance, Parks and Rec, and DOT is possible.
 - Finalize and circulate opinion on ADA standard for snow clearing
 - Finalize standard for alignment of non-motorized snow clearing and Safe Routes to School (what happens when routes change? When a school closes or opens? When a new sidewalk is constructed?).
- Continue to push coordination efforts with ASD, DOT, and ADP:
 - Continue to evolve understanding of ASD closure standard and any "must plow" streets.
 - Continue to request critical path issues early the night before a potential winter weather day in order to prioritize these for the Street Maintenance team.
 - Continue coordination with DOT around bus stop clearing.
 - Open question of whether MOA/State clearing of non-motorized pathways can be rationalized.
 - Need to debrief winter efforts with ADP.
- Set annual cadence for updating key documents (Snow and Ice Control Plan, WOPPR, comms plan).
- Continue to adapt to both snow and ice paradigms
- Complete review of possible MOA wetland properties available for use as snow dump sites.
- Continue to explore expansion of Mountain View snow dump site.

Plow-out Timeline/Cost Analysis

Executive Summary

This analysis examines the resources needed and the associated cost of reducing the time required to plow approximately 1400 lane miles of MOA-owned streets located within the Anchorage Roads and Drainage Service Area (ARDSA). The current standard for a plow-out is 84 calendar hours.

The analysis estimates staffing, capital acquisition, and operating costs to establish Street Maintenance organizations for 72-hour, 60-hour, 48-hour, 36-hour, and 24-hour plow-out times.

72-hour plow-out

- Annual operating cost increase = \$830k
- Capital cost = \$975k

60-hour plow-out

- Annual operating cost increase = \$5.31m
- Capital cost = \$4.2m

48-hour plow-out

- Annual operating cost increase = \$9.54m
- Capital cost = \$25.3m

36-hour plow-out

- Annual operating cost increase = \$17.2m
- Capital cost = \$46.1m

24-hour plow-out

- Annual operating cost increase = \$32.4m
- Capital cost = \$75.5m

It is critical to note that while we can calculate the expenditures for people and equipment to plow 1400 lanes miles during an established timeframe, it is not entirely accurate to say that cost is the cost of a plow-out. Street Maintenance has a standing workforce and equipment fleet that is paid for whether a plow-out is underway or not. The fully burdened labor cost for Street Maintenance in 2024 was about \$56,600/working day. Fleet cost (excluding fuel) was about \$12,500/calendar day for 219 pieces of equipment. Those standing costs do not change during a plow-out, except for overtime as required and fuel usage above normal operations.

Assumptions:

- Plow-out is performed using grader teams. A grader team comprises two graders and two operators. For a full day of operation, this requires twice as many operators than there are graders in the fleet. For example, a plow-out using 15 grader teams will require 30 graders and 60 operators to conduct two shifts per day.
- Basis of analysis is a plow-out of an average snow event (6" 12")
- Plow-outs calculated based on 10-hour shifts, 9 hours of plow time (to accommodate fueling, equipment servicing, etc.)
- Plow outs calculated based on straight time.
- Current grader fleet = 30 graders.
- Plan for 10% spare graders to cover breakdowns.
- 60-, 48-, 36-, and 24-hour plow models require additional superintendent(s) (NR-18), supervisor(s) (NR-17), equipment technician(s) (L302 grade 18), heavy equipment mechanics (IBEW Tech grade 18), and heavy equipment operators (L302 grade 18).
- 60-, 48-, 36-, and 24-hour plow calculations require additional graders and pickup trucks for added supervisory staff, with associated capital and operating/rental costs.
- 48-, 36-, and 24-hour plow calculations require additional warm storage and fleet maintenance buildings with associated capital costs.
- Grader capital acquisition cost = \$325k.
- Pickup capital acquisition cost = \$60k.
- Warm storage/equipment maintenance building capital cost = \$600/sf
- Analysis assumes that ten existing, vacant, and funded LEO positions are reclassified to HEO positions to staff grader teams.
- Heavy Equipment Operators (HEO) and Equipment Technicians (ET) costed at full time and 6-month seasonal.
- Adding seasonal HEO and ET positions require changes to allow MOA contributions to Local 302 retirement and medical to make winter seasonal employment attractive to L302 operators. This is recommended as an emphasis item for possible implementation.
- Analysis does not propose a pay increase for HEO. However, it is apparent that a significant pay increase is needed to attract qualified applicants; current MOA pay lags many private construction employers.
- Non-represented Supervisors and Superintendents costed at full time with no seasonal option.
- Heavy equipment mechanics costed at full time with no seasonal option.

Current Status:

- 84 hour plow-out
- 15 grader teams day shift; requires 30 graders and 30 operators.
- 10 grader teams night shift; requires 20 graders and 20 operators.
- Limiting factor is staffing. Ten additional heavy equipment operators (HEO) to staff 5 additional grader teams on night shift will reduce plow-out time to 72 hours.

72-hour plow out:

- 15 grader teams day shift
- 15 grader teams night shift
- 3 new graders for spares
- Convert 10 existing LEO positions to HEO
- No additional ET, superintendent, supervisor
- Annual operating cost increase with full-time year-round HEO = \$831k
- Capital cost = \$975k (3 spare graders for redundancy/reliability)

60-hour plow out:

- 19 grader teams day shift
- 19 grader teams night shift
- 12 new graders (includes 4 spares)
- 5 new pickup trucks
- 16 additional HEO
- Reclassify 10 LEO positions to HEO
- 2 additional ET
- 1 additional heavy equipment mechanic
- 1 additional superintendent
- 2 additional supervisors
- Annual operating cost increase with full-time year-round HEO and ET = \$5.31m
- Annual operating cost increase with seasonal HEO and ET = \$3.72m
- Capital cost graders and pickup trucks = \$4.2m

48-hour plow out:

- 23 grader teams day shift
- 23 grader teams night shift
- 21 new graders (includes 5 spares)
- 8 new pickup trucks
- 32 additional HEO
- Reclassify 10 LEO positions to HEO
- 3 additional ET
- 3 additional heavy equipment mechanics
- 1 additional superintendent
- 4 additional supervisors

- 20,000 sf warm storage building
- 10,000 sf equipment maintenance building
- Annual operating cost increase with full-time year-round HEO and ET = \$9.54m
- Annual operating cost increase with seasonal HEO and ET = \$6.45m
- Capital cost graders and pickup trucks = \$7.31m
- Capital cost warm storage building = \$18.0m

36-hour plow out:

- 31 grader teams day shift
- 31 grader teams night shift
- 38 new graders (includes 6 spares)
- 12 new pickup trucks
- 64 additional HEO
- Reclassify 10 LEO positions to HEO
- 4 additional ET
- 5 additional heavy equipment mechanics
- 2 additional superintendents
- 6 additional supervisors
- 40,000 sf warm storage building
- 15,000 sf equipment maintenance building
- Annual operating cost increase with full-time year-round = \$17.23m
- Annual operating cost increase with seasonal HEO and ET = \$11.23m
- Capital cost graders and pickup trucks = \$13.1m
- Capital cost warm storage building = \$33.0m

24-hour plow out:

- 46 grader teams day shift
- 46 grader teams night shift
- 71 new graders (includes 9 spares)
- 23 new pickup trucks
- 124 additional HEO
- Reclassify 10 LEO positions to HEO
- 8 additional ET
- 9 additional heavy equipment mechanics
- 3 additional superintendents
- 12 additional supervisors
- 65,000 sf warm storage building
- 15,000 sf equipment maintenance
- Annual operating cost increase with full-time year-round HEO and ET = \$32.39m
- Annual operating cost increase with seasonal HEO and ET = \$20.73m
- Capital cost graders and pickup trucks = \$24.46m
- Capital cost warm storage building = \$51.0m

Other options:

Other possible options for reducing the time required to perform a plow-out include eliminating the use of gates on grader blades, changing the type of equipment MOA uses for plowing, or contracting out the work.

Eliminating gates:

We estimate that using gates on graders adds 15% to 20% to the time it takes to plow. This is most pronounced in residential neighborhoods. If combined with aggressive efforts to reduce on-street parking during snow events, time savings could approach 30%.

Changing equipment:

Many winter cities plow snow using dump trucks and similar equipment with plows mounted on the front of trucks. It is reasonable to estimate that a truck with a plow may average 7 mph during plowing operations. MOA graders with gates average about 1.7 mph.

Assuming an average speed of 7 mph, nine teams of trucks could plow 1400 lane miles in 24 hours over two 9-hour shifts. Ten teams of trucks could plow 1400 lane miles in about 36 hours over three 9-hour shifts.

Contracting:

MOA currently contracts for graders at \$220/hour. Using a conservative estimate of \$250/hour, or \$500/hour for a grader team, and assuming a production rate of 1.5 mph, a fully contracted response could plow 1400 lane miles in about 940 hours, at a cost of \$470,000. Ideally, a contracted approach could be scaled to apply more resources in order to accomplish a shorter plow-out time. However, the reality may be that there are not enough privately owned, appropriately sized graders (Caterpillar 140M or equivalent) available in Anchorage to provide a concerted response to a snow event. Extensive research conducted by Street Maintenance during the winters of 2022/2023 and again in 2023/2024 indicated that few contractors in Anchorage have appropriate equipment for this purpose.

In addition, it is not reasonable to assume that under a contracted response approach MOA would pay only the cost of a plow-out. To attract qualified contractors and expect them to acquire 40, 50, or perhaps 60 graders and have operators available all winter would require a contract with a base payment irrespective of work performed. This model would require more research and market analysis.

72-Hour Plowout	\neg					
/2-Hour Plowoul						т
Shifts	6	 '	+			-
Miles/shift	233	miles	+		+	+
# of teams/shift needed	255 15	grader teams	+			+
# or teams/smit needed	30	teams	+		+	+
Total realis		leans ,				+
Resources needed to accomplish:						-
15 plow teams per shift, 2 shifts per da	w Requires 30 grader	rs and 60 onerat	ore			
13 plow teams per sime, 2 simes per au	y. nequires ou prade.	s allu oo operate	лъ.			<u> </u>
Gap	Graders	Operators	Supv.	Supt.	Eq. Tech	Mechanic
Current	30	50	6	2	4	
Required	30	60	6	2	4	
Convert LEO to HEO		10				
Spare	3					
Need to hire/add	3	0	0	0	0	0
Staffing cost	Quantity	Daily Rate	Annual Cost			
Convert 10 existing LEO to HEO	10	\$ 264.00	\$ 689,040			
Heavy Equipment Operator	0	\$ 676.50	\$ -			
Equipment annual cost	Quantity	Daily Rate	Annual Cost			
Graders	3	\$ 131.30	\$ 141,804			
Equipment capital cost	Quantity	Unit cost	Total			
Graders	3	\$ 325,000	\$ 975,000			
Annual cost increase	\$ 830,844	<u> </u>				
		4				

\$

975,000

Capital cost

60-Hour Plowout									
Shifts	5								
Miles/shift	280	mile							
# of teams/shift needed	18.3	grad	ler teams	(use	e 19)				
Total Teams	38	tear	ns						
Resources needed to accomplish:									
19 plow teams per shift, 2 shifts per day. R	equires 38 grader	s and	d 76 operato	ors.					
Gap	Graders	0	perators		Supv.		Supt.	Eq. Tech	Mechanic
Current	30		50		6		2	4	
Required	38		76		8		3	6	
Convert LEO to HEO			10						
Spare grader @ 10%	4								
Need to hire/add	12		16		2		1	2	1
Staffing cost	Quantity	D	aily Rate	Α	nnual Cost	6-1	month cost		
Convert 10 existing LEO to HEO	10	\$	264.00	\$	689,040				
Heavy Equipment Operator IUOE Gr. 18	16	\$	676.50	\$	2,825,064	\$	1,412,532		
Supervisor NR-17	2	\$	808.50	\$	422,037				
Superintendent NR-18	1	\$	973.50	\$	254,084				
Equipment technician IUOE Gr. 18	2	\$	676.50	\$	353,133	\$	176,567		
Heavy Equip. Mechanic IBEW-Tech Gr. 18	1	\$	709.50	\$	185,180				
Equipment annual cost	Quantity	D	aily Rate	Α	nnual Cost				
Graders	12	\$	131.30	\$	567,216				
Pickups	5	\$	9.00	\$	16,200				
Equipment capital cost	Quantity	U	Init cost		Total				
Graders	12	\$	325,000	\$	3,900,000				
Pickups	5	\$	60,000	\$	300,000				
Annual cost increase	\$ 5,311,953								
Modified annual cost increase	\$ 3,722,855	(6 n	nonth HEO	and	ET)				
Capital cost	\$ 4,200,000	,51		ana	,				

48-Hour Plowout									
Shifts	4	L.							
Miles/shift	350	mile							
# of teams/shift needed	23	Ť	ler teams						
Total Teams	46	tear	ns						
Resources needed to accomplish:									
23 plow teams per shift, 2 shifts per day. R	equires 46 grader	s and	d 92 operato	ors.					
Gap	Graders	0	perators		Supv.		Supt.	Eq. Tech	Mechanic
Current	30		50		6		2	4	
Required	46		92		10		3	7	
Convert LEO to HEO	-		10						
Spare grader @ 10%	5								
Need	21		32		4		1	3	3
Staffing cost	Quantity	D	aily Rate	Α	Innual Cost	6-	month cost		
Convert 10 existing LEO to HEO	10	\$	264.00	\$	689,040				
Heavy Equipment Operator IUOE Gr. 18	32	\$	676.50	\$	5,650,128	\$	2,825,064		
Supervisor NR-17	4	\$	808.50	\$	844,074				
Superintendent NR-18	1	\$	973.50	\$	254,084				
Equipment technician IUOE Gr. 18	3	\$	676.50	\$	529,700	\$	264,850		
Heavy Equip. Mechanic IBEW-Tech Gr. 18	3	\$	709.50	\$	555,539				
Equipment annual cost	Quantity	D	aily Rate	Α	Innual Cost				
Graders	21	\$	131.30	\$	992,628				
Pickups	8	\$	9.00	\$	25,920				
Equipment capital cost	Quantity	ι	Init cost		Total				
Graders	21	\$	325,000	\$	6,825,000				
Pickups	8	\$	60,000	\$	480,000				
Facilities Capital Cost	Area (sf)		Init cost		Total				
Warm storage building	20,000	\$	600	\$	12,000,000				
Equipment maintenance building	10,000	\$	600	\$	6,000,000	-			
Equipment maintenance building	10,000	Ψ	000	Ψ	0,000,000				
Annual cost increase	\$ 9,541,112								
Modified annual cost increase	\$ 6,451,198	98 (6 month HEO			I ET)				
Capital cost	\$ 25,305,000								

36-Hour Plowout									
Shifts	3								
Miles/shift	467	mile							
# of teams/shift needed	31	Ť	ler teams						
Total Teams	62	tear	ns						
Resources needed to accomplish:									
31 plow teams per shift, 2 shifts per day. R	equires 62 grader	s and	1 124 onera	tors	:				
of providentia per anni, 2 annia per day. Ti	equires 02 grader	June	i 124 opcia	LOIC) .				
Gap	Graders	0	perators		Supv.		Supt.	Eq. Tech	Mechanic
Current	30		50		6		2	4	
Required	62		124		12		4	8	
Convert LEO to HEO			10						
Spare grader @ 10%	6								
Need	38		64		6		2	4	5
Staffing cost	Quantity	D	aily Rate	F	Annual Cost	6-	month cost		
Convert 10 existing LEO to HEO	10	\$	264.00	\$	689,040				
Heavy Equipment Operator IUOE Gr. 18	64	\$	676.50	\$	11,300,256	\$	5,650,128		
Supervisor NR-17	6	\$	808.50	\$	1,266,111				
Superintendent NR-18	2	\$	973.50	\$	508,167				
Equipment technician IUOE Gr. 18	4	\$	676.50	\$	706,266	\$	353,133		
Heavy Equip. Mechanic IBEW-Tech Gr. 18	5	\$	709.50	\$	925,898				
Equipment annual cost	Quantity	D	aily Rate	F	Annual Cost				
Graders	38	\$	131.30	\$	1,796,184				
Pickups	12	\$	9.00	\$	38,880				
Equipment capital cost	Quantity	ι	Init cost		Total				
Graders	38	\$	325,000	\$	12,350,000				
Pickups	12	\$	60,000	\$	720,000				
Escilitios Capital Cost	Aroc (of)	l l m²	it oost		Total				
Facilities Capital Cost	Area (sf)	1	it cost	_	Total	-			
Warm storage building	40,000	\$	600	\$	24,000,000				
Equipment maintenance building	15,000	\$	600	\$	9,000,000				
Annual cost increase	\$ 17,230,802								
Modified annual cost increase	\$ 11,227,541				l ET)				
Capital cost	\$ 46,070,000				·				1

24-Hour Plowout									
Shifts	2								
Miles/shift	700	miles							
# of teams/shift needed	46	F	r teams						
Total Teams	92	teams	S						
Resources needed to accomplish:									
46 plow teams per shift, 2 shifts per day. R	equires Q2 grader	e and 1	194 onerat	tore					
40 plow learns per shirt, 2 shirts per day. In	equiles 92 grader	s allu 1	104 opera	tors) .				
Gap	Graders	Ope	erators		Supv.		Supt.	Eq. Tech	Mechanic
Current	30		50		6		2	4	
Required	92		184		18		5	12	
Convert LEO to HEO			10						
Spare grader @ 10%	9								
Need	71		124		12		3	8	9
Staffing cost	Quantity	Dai	ly Rate	1	Annual Cost	6-r	nonth cost		
Convert 10 existing LEO to HEO	10	\$	264.00	\$	689,040				
Heavy Equipment Operator IUOE Gr. 18	124	\$	676.50	\$	21,894,246	\$:	10,947,123		
Supervisor NR-17	12	\$	808.50	\$	2,532,222				
Superintendent NR-18	3	\$	973.50	\$	762,251				
Equipment technician IUOE Gr. 18	8	\$	676.50	\$	1,412,532	\$	706,266		
Heavy Equip. Mechanic IBEW-Tech Gr. 18	9	\$	709.50	\$	1,666,616				
Equipment annual cost	Quantity	Dai	ly Rate	I	Annual Cost				
Graders	71	\$	131.30	\$	3,356,028				
Pickups	23	\$	9.00	\$	74,520				
Equipment capital cost	Quantity	Un	it cost		Total				
Graders	71	\$	325,000	\$	23,075,000				
Pickups	23	\$	60,000	\$	1,380,000				
			_						
Facilities Capital Cost	Area (sf)	Unit		<u> </u>	Total				
Warm storage building	65,000	\$	600	\$	39,000,000				
Equipment maintenance building	20,000	\$	600	\$	12,000,000				
Annual cost increase	\$ 32,387,454								
Modified annual cost increase	\$ 20,734,065	(6 ma	onth HEO	anc	I ET)				
Capital cost	\$ 75,455,000				,				

Staffing modeling

Assumptions:		
Plow time/team/shift	9	hours
Lane miles	1400	miles
Plow team production	1.7	miles/hour/grader team
Current: 84-Hour Plowout		
Shifts	7	3.5 days, 2 shifts per day
Miles/shift	200	miles
# of teams/shift needed	13	grader teams
72-Hour Plowout		
Shifts	6	3 days, 2 shifts per day
Miles/shift	233	miles
# of teams/shift needed	15	grader teams
60-Hour Plowout		
Shifts	5	2.5 days, 2 shifts per day
Miles/shift	280	miles
# of teams/shift needed	18.3	grader teams Use 19
48-Hour Plowout		
Shifts	4	2 days, 2 shifts per day
Miles/shift	350	miles
# of teams/shift needed	23	grader teams
36-Hour Plowout		
Shifts	3	1.5 days, 2 shifts per day
Miles/shift	467	miles
# of teams/shift needed	31	grader teams
24-Hour Plowout		
Shifts	2	1 day, 2 shifts per day
Miles/shift	700	miles
# of teams/shift needed	46	grader teams

Municipality of Anchorage Mayor Suzanne La France

- Maintenance & Operations Equipment Maintenance -

TO: Rebecca A. Windt Pearson, Municipal Manager

THRU: Kent Kohlhase, Public Works Director

THRU: Shay Throop, M&O Director

FROM: Lee Lutkowski, Fleet Manager

Subject: 2025 Streets Tax Levy Expenditures

M&O Fleet Management recommends the following purchases to replace existing ageing equipment from the 2025 \$3.5 Million Tax Levy. \$500,000.00 was utilized from the 2024 Capital Fund to supplement.

1. Three (3) Caterpillar 140M3 Motorgraders \$1,000,000.00

2. Four (4) Freightliner Sander Trucks w/snowplows \$1,600,000.00

3. Four (4) RPM Tech 40 Loader mtd SnowBlowers \$1,400,000.00

\$4,000,000.00



Municipality of Anchorage Mayor Suzanne La France

- Maintenance & Operations Equipment Maintenance -

TO: Rebecca Anne Windt Pearson, Municipal Manager

THRU: Kent Kohlhase, Public Works Director

THRU: Shay Throop, M&O Director

FROM: Lee Lutkowski, Fleet Manager

Subject: Proposed 2026 Streets Tax Levy Expenditures

M&O Fleet Management recommends the following purchases to replace existing ageing equipment from the 2026 \$3.5 Million Tax Levy.

1. Six (6) Caterpillar 140M3 Motorgraders \$2,000,000.00

2. One (1)LaRue T70 Self-Propelled Snowblower \$800,000.00

3. Two (2) Caterpillar 950GC Wheeled Loader \$700,000.00

\$3,500,000.00

