



Winter 2024-2025 Snow Removal Planning

*Assembly Transportation Committee
September 12, 2024*

Annual Anchorage Snowfall (in inches, per NOAA data)



Winter 2023-2024: By the Numbers

108,000 loads of snow hauled (**10,000** from the Central Business District alone)

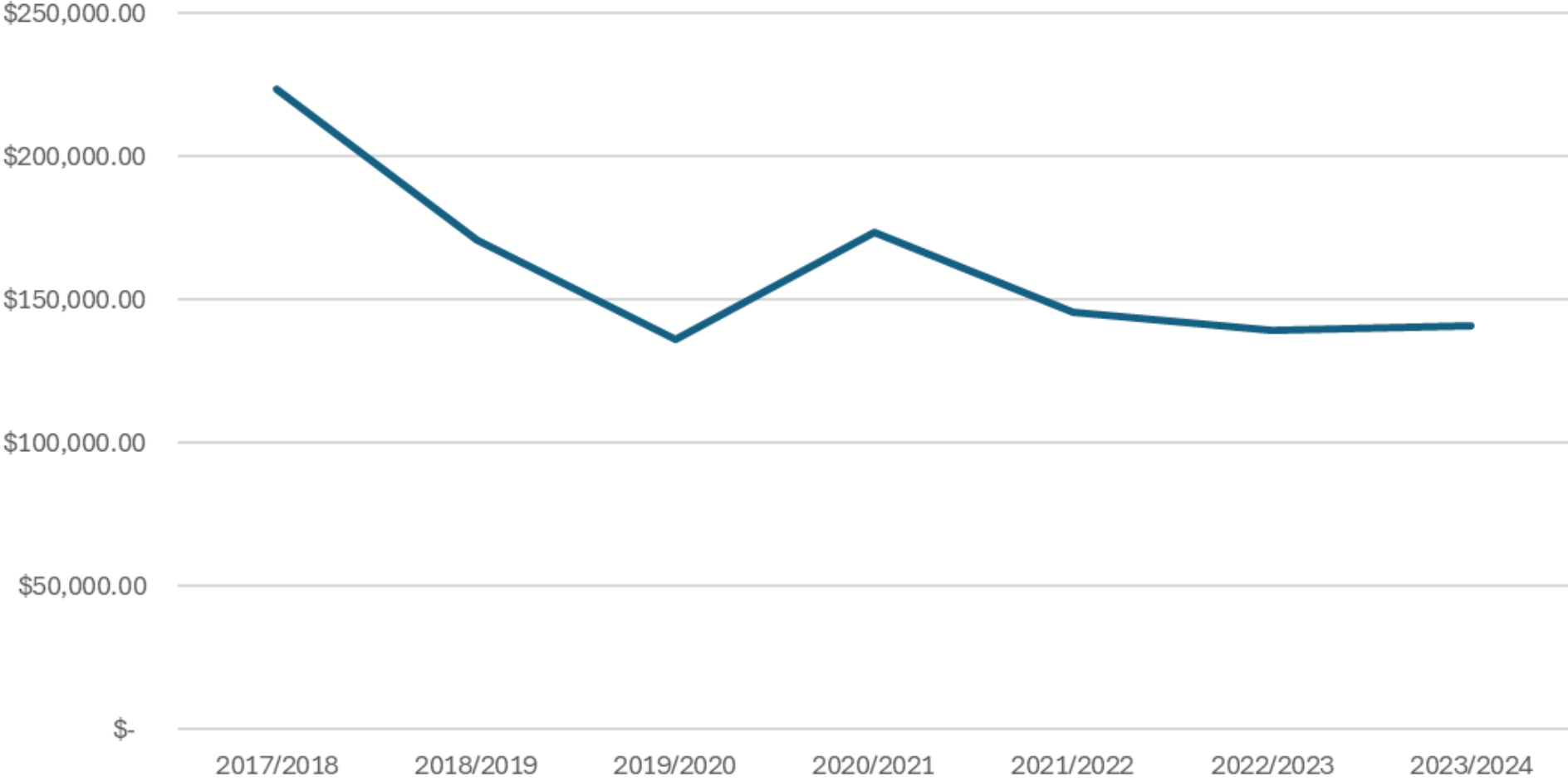
2,160,000 cubic yards of snow hauled to snow dumps (one cubic yard is roughly the size of a washing machine)

210 Hauling shifts (days and nights) worked in 130 days

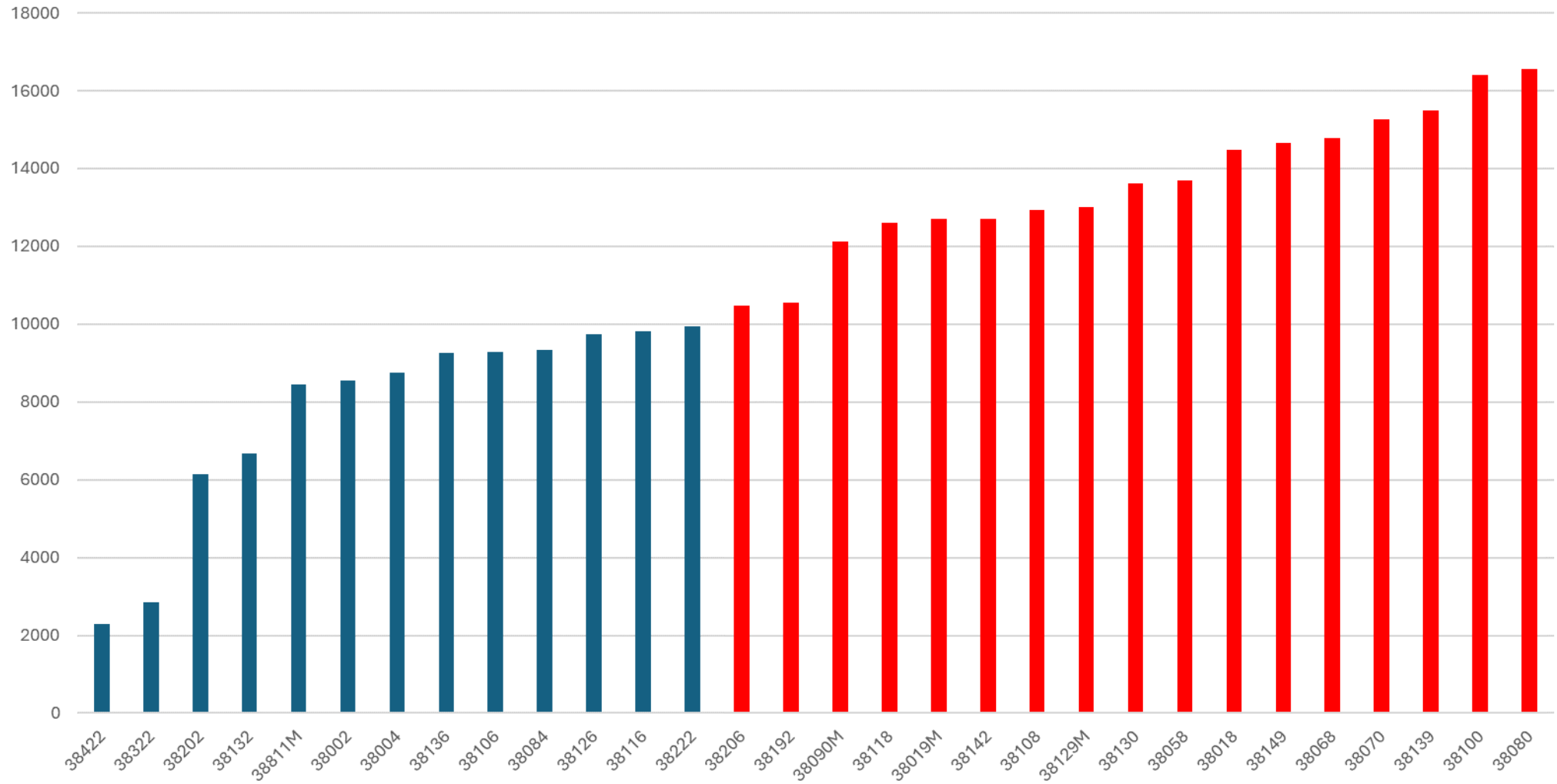
By the Numbers: Five Year Perspective

Winter Season	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024
	Oct-Mar	Oct-Mar	Oct-Mar	Oct-Mar	Oct-Mar	Oct-Mar	Oct-Mar
Amount Spent	\$ 13,047,919.42	\$ 11,104,072.46	\$ 12,058,386.80	\$ 12,019,578.77	\$ 13,015,969.54	\$ 15,031,322.72	\$ 18,776,892.68
Staffing	82	82	81	79	68	65	67
Snow In Inches	58.3	65	88.6	69.2	89.3	107.9	133.3
Contracted / Truck Load Cost	\$63.25	\$61.74	\$61.74	\$61.74	\$67.24	\$113.00	\$113.00
Total Truck Loads	35,348.00	39,436.00	49,403.00	62,798.00	63,125.00	96,249.50	108,039.25
Amount of Snow Hauled in Yards	706,960.00	788,720.00	988,060.00	1,255,960.00	1,262,500.00	1,924,990.00	2,160,785.00

Dollars Spent Per Inch of Snow



Engine Hours on MOA's 30 Graders



Maintenance & Operations¹ Position Count by Job Classification as of 9/1/2024

Job Class Number	Job Class Title	Personnel Subarea	Pay Grade	Regular Filled	Regular Vacant	Temporary Filled	Temporary Vacant	Total PCNs	Vacancy Percent
20000523	Manager	Non-Represented	GRD18	2	0	0	0	2	0.00%
20000509	Superintendent	Non-Represented	GRD17	2	0	0	0	2	0.00%
20000481	General Foreman	Non-Represented	GRD16	0	1	0	0	1	100.00%
20000462	Street Maintenance Supervisor	Non-Represented	GRD15	6	0	0	0	6	0.00%
20000463	Maintenance Supervisor	Non-Represented	GRD15	3	0	0	0	3	0.00%
20000161	Heavy Equipment Operator Leadman	Op Engr 302	GRD19	5	0	0	0	5	0.00%
20000155	Heavy Equipment Operator	Op Engr 302	GRD18	28	0	0	0	28	0.00%
20000152	Medium Equipment Operator	Op Engr 302	GRD17	29	7	0	9	45	35.56%
20000146	Light Equipment Operator	Op Engr 302	GRD11	3	7	0	12	22	86.36%
20000163	Equipment Operations Technician II	Op Engr 302	GRD20	1	0	0	0	1	0.00%
20000154	Equipment Operations Technician I	Op Engr 302	GRD18	3	0	0	0	3	0.00%
20000159	Warehouseman Journeyman	Op Engr 302	GRD18	1	0	0	0	1	0.00%
20000144	Airport Maintenance Assistant	Op Engr 302	GRD07	2	0	1	1	4	25.00%
20000375	Expeditor	IBEW-Technician	GRD18	1	0	0	0	1	0.00%
20000376	Lead Equipment Technician	IBEW-Technician	GRD18	2	0	0	0	2	0.00%
20000377	Equipment Technician/Welder	IBEW-Technician	GRD18	1	1	0	0	2	50.00%
20000372	Parts Warehouseman	IBEW-Technician	GRD17	2	0	0	0	2	0.00%
20000373	Body Repair Technician	IBEW-Technician	GRD17	2	0	0	0	2	0.00%
20000374	Equipment Technician	IBEW-Technician	GRD17	11	5	0	0	16	31.25%
20000370	Equipment Service Technician I	IBEW-Technician	GRD15	0	2	0	0	2	100.00%
20000371	Equipment Service Technician II	IBEW-Technician	GRD16	2	1	0	0	3	33.33%
20000380	Seasonal Parks Caretaker I	Local 71	GRD06	0	0	1	2	3	66.67%
20000384	Seasonal Parks Caretaker II	Local 71	GRD10	0	0	1	0	1	0.00%
Total PCNs				106	24	3	24	157	30.57%

2024-2025 Plan

Incremental Progress: 7 Offers in Process

2024-2025 Plan: Fleet



MUNICIPALITY OF ANCHORAGE # 10.C.1.

ASSEMBLY MEMORANDUM

AM No. 685-2024

Meeting Date: September 10, 2024

1 FROM: MAYOR

2
3 SUBJECT: COOPERATIVE PURCHASE FROM N C MACHINERY (NC) THROUGH STATE
4 OF ALASKA CONTRACT #: CA2403-24 FOR THE PURCHASE OF THREE
5 CATERPILLAR MOTOR GRADERS FOR THE MUNICIPALITY OF
6 ANCHORAGE (MOA), MAINTENANCE & OPERATIONS (M&O) (NOT TO
7 EXCEED (NTE) \$948,567.00).

8
9 M&O is requesting approval of a Cooperative Purchase from NC, through State of Alaska
10 Contract #: CA2403-24, for three new Caterpillar 140M Motor Graders, in the NTE amount of
11 \$316,189.00 each, for a total of \$948,567.00. Delivery of this equipment is expected by the Fall
12 of 2025.

13
14 This equipment will replace three existing graders that have reached the end of their useful life
15 and are consistent with Fleet management's regular equipment replacement schedule. Street
16 Maintenance Operators and Fleet Maintenance Technicians have abundant experience in the
17 operation, maintenance, and repair of this equipment. This equipment will be primarily used in
18 support of the MOA's snow removal efforts. Funding will be accomplished using a combination
19 of funds from a voter-approved ARDSA bond, and 2022 and 2023 Fleet equipment
20 replacement capital budgets.



MUNICIPALITY OF ANCHORAGE ASSEMBLY MEMORANDUM

No. AM 705-2024

Meeting Date: September 10, 2024

1 FROM: MAYOR

2
3
4 SUBJECT: A RESOLUTION OF THE MUNICIPALITY OF ANCHORAGE
5 APPROPRIATING THREE MILLION SEVEN HUNDRED FIFTY
6 THOUSAND DOLLARS (\$3,750,000) FROM THE EQUIPMENT
7 MAINTENANCE FUND (601000), UNRESTRICTED NET POSITION,
8 APPROPRIATING SEVEN HUNDRED FIFTY THOUSAND DOLLARS
9 (\$750,000) TO THE 2024 OPERATING BUDGET EQUIPMENT
10 MAINTENANCE FUND (601000) AND APPROPRIATING THREE
11 MILLION DOLLARS (\$3,000,000) AS A TRANSFER TO THE
12 EQUIPMENT MAINTENANCE CAPITAL IMPROVEMENT PROJECTS
13 (CIP) FUND (601800), MAINTENANCE & OPERATIONS DEPARTMENT,
14 FOR REPAIR AND REPLACEMENT OF GENERAL GOVERNMENT
15 EQUIPMENT.

16
17 The attached resolution appropriates \$3,750,000 from the Equipment Maintenance Fund
18 (610000), Unrestricted Net Position, appropriating \$750,000 to the 2024 Operating Budget
19 Equipment Maintenance Fund (601000) and appropriating \$3,000,000 to the Equipment
20 Maintenance CIP Fund (601800) for repair and replacement of general government
21 equipment.

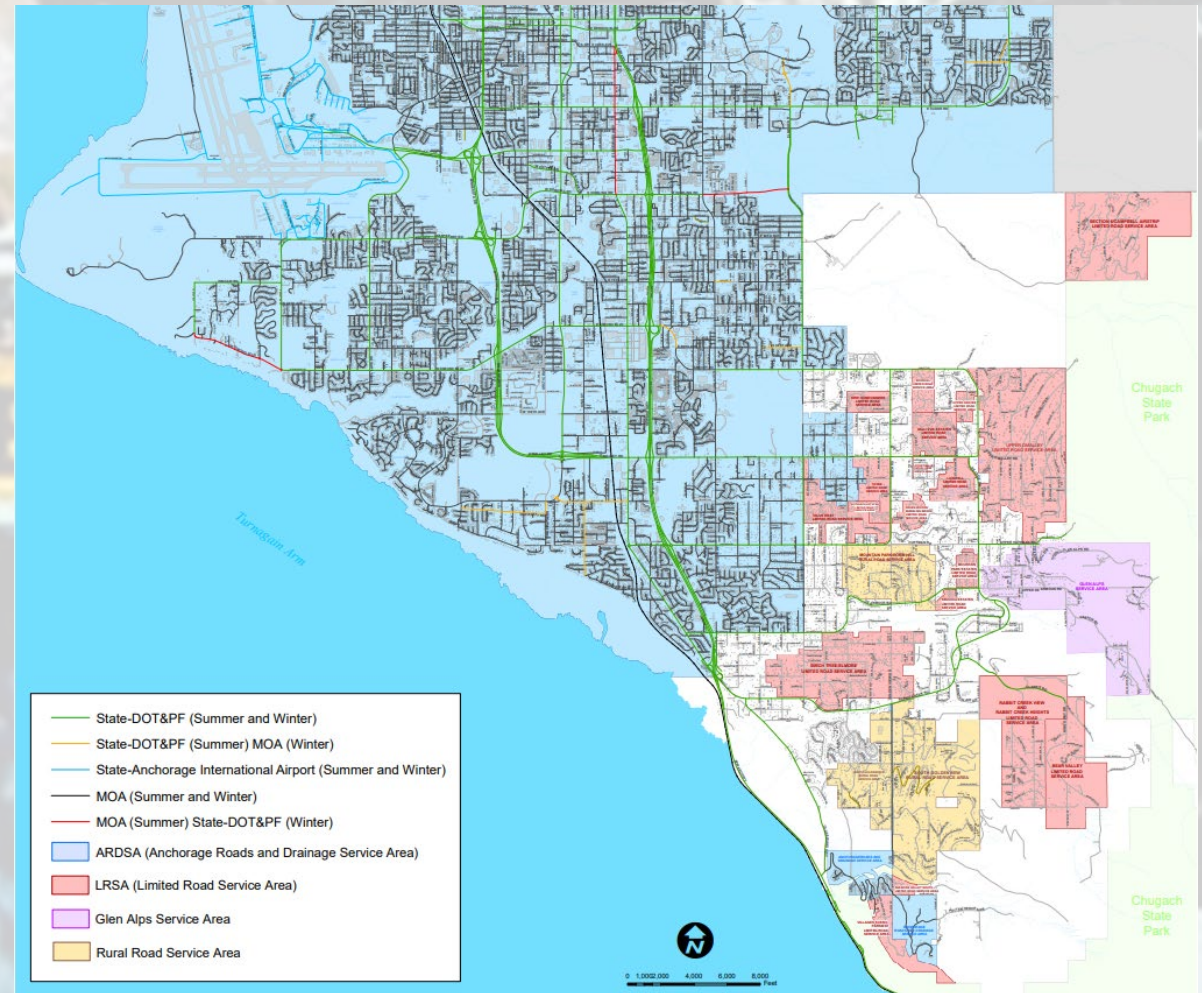
22
23 The rising cost of parts and services along with supply chain shortages has created a
24 budget shortfall in Fleet maintenance operating budget since 2022. Fleet maintenance
25 received a supplemental budget appropriation of \$500,000 on AR 2022-284 in 2022 and a
26 supplemental appropriation of \$750,000 on AR 2023-255 to cover the rising cost of repair
27 costs for the municipal general government equipment. This appropriation is requesting
28 \$750,000 to the 2024 Operating Budget to cover repair costs for the remainder of the year.

29
30 The Equipment Maintenance Fund (601000) has unrestricted net position funding available
31 in the amount of \$3,000,000 that fleet maintenance is requesting to utilize to supplement the
32 annual \$2,300,000 of replacement funds in 2024. The table below provides summary detail
33 of the proposed use of the supplemental funding. If any of the equipment listed below is no
34 longer available or if any funds remain after these acquisitions, the next highest priority
35 vehicle or equipment on the replacement schedule will be procured as funds allow. After the
36 invitation to bid and the contract award process is complete, delivery of the vehicles or
37 equipment will range from 90 to 300 days.

Quantity	Description	Amount
10	4x4 Pickups with Plows	\$750,000
1	Vacuum Truck (Vactor)	\$750,000
1	Sander Truck w/ Belly Blade and Plow	\$600,000
3	Motor Graders	\$900,000

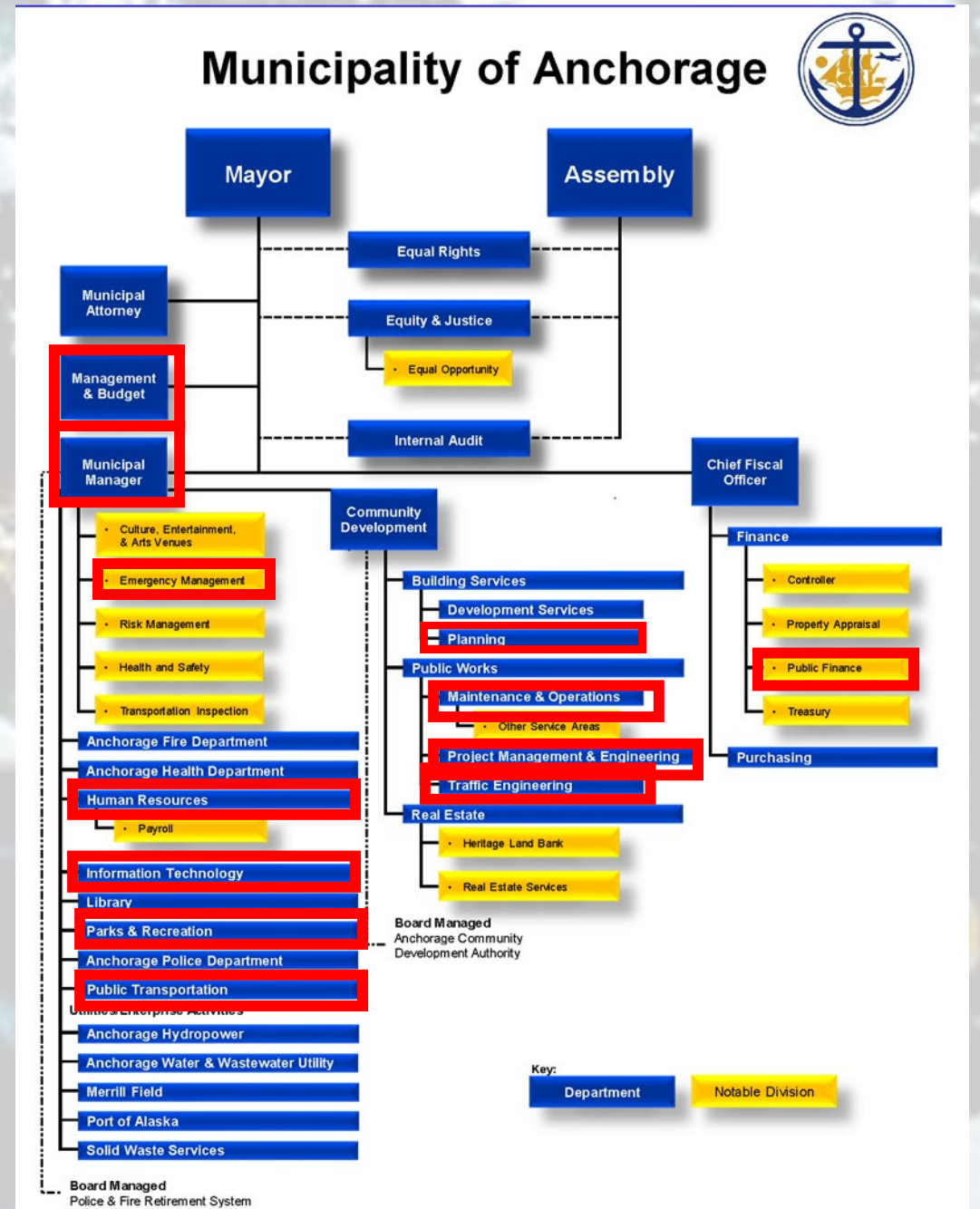
2024-2025 Plan: Coordination

- Expanding pre-season collaboration from operational to policy level on shared issues including:
 - Bus stops
 - Timing of street vs. sidewalk clearing
 - Tweaks to existing TORA agreements
 - Process for addressing 2024-2025 issues
 - Possible adaptation of service-level commitments in significant snow events
- Proactive pre-season coordination with:
 - Anchorage Downtown Partnership
 - Anchorage School District
 - AK DOT



2024-2025 Plan: Coordination

- 12 departments engaged
- Cross-functional working group divided into workstreams to address goals



2024-2025 Plan: Planning

SNOW & ICE

CONTROL

PLAN

Winter 2023-2024

E. SNOW AND ICE ALERT RESPONSE LEVELS

Designated snow routes have been determined by traffic volume, public transit routes, school bus routes, hospitals, schools, and hazards such as hills, curves and intersections. In the Central Business District, special parking restrictions also go into effect. In a Level 1 response, snow routes, sidewalks and the CBD are plowed while residential streets are plowed under Level 2 and Level 3 responses.

1. Level 1 (zero to four-inch snowfall):

Snow routes will normally be plowed using underbody truck plows mounted on dump trucks and aggregate hauling trucks. When required, aggregate placement and sidewalk plowing will be done simultaneously with plowing.

2. Level 2 (four or more inches of snow):

All Level 1 activity continues. Graders with gates will plow all residential streets. Once the snow has stopped falling a plow out will be declared, with a goal of plowing all residential streets within 84 hours.

The Manager of Street Maintenance has the authority to manage and augment the amount of equipment and personnel engaged in storm activities using additional contracted equipment or other Municipal agency resources to meet necessary time frames.

The Municipal Manager or a designee also has authority to implement certain provisions of the emergency parking ordinance, including the authority to direct APD to tow illegally parked vehicles to allow plowing operations to proceed.

3. Level 3 (Snow Emergency):

When Street Maintenance is unable to maintain roads at an acceptable level, the Mayor may declare a snow emergency. A Level 3 response will constitute maximum effort in providing all available resources (private and public) to clear roadways.

2024-2025 Plan: Communication



MUNICIPALITY OF ANCHORAGE # 10.D.4.

ASSEMBLY MEMORANDUM

AM No. 689-2024

Meeting Date: September 10, 2024

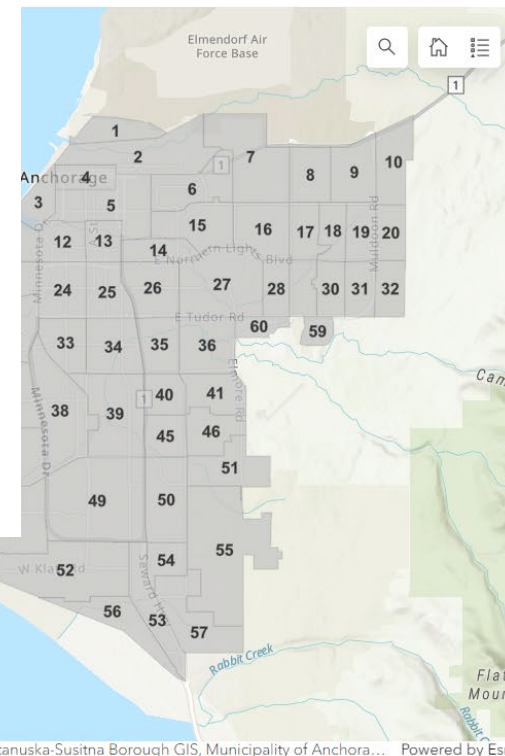
1 FROM: MAYOR

2
3 SUBJECT: SOLE SOURCE PURCHASE FROM ENVIRONMENTAL SYSTEMS
4 RESEARCH INSTITUTE, INC. (ESRI) FOR SOFTWARE AND CONSULTING
5 SERVICES TO THE MUNICIPALITY OF ANCHORAGE (MOA), COMMUNITY
6 DEVELOPMENT DEPARTMENT (CD), GEOGRAPHIC DATA AND
7 INFORMATION CENTER (GDIC) (NOT TO EXCEED (NTE) \$42,650.00).

8
9 The GDIC is requesting approval of a Sole Source purchase from ESRI for ArcGIS software
10 and consulting services, in the NTE amount of \$42,650.00.

11
12 This purchase includes the ArcGIS Velocity add-on for our existing ArcGIS subscription and
13 remote consulting. The ArcGIS Velocity add-on is a one-year license that will allow us to import,
14 visualize, analyze, store, and use data from Internet of Things (IoT) sensors. The price for this
15 add-on is \$20,300.00 for a one-year license. The remote consulting services package will
16 provide 60 hours of remote consulting for the development of real-time GPS data processing
17 for Street Maintenance and Parks and Recreation snow removal vehicles, at a price of
18 \$22,350.00. An alternative technology platform with the same capability is not available.

Residential Street Plow Status



Daily Update

3/18/2024, 7:28 AM

Daily Update Plow Out Declaration

Sectors In Progress

0

Sectors Delayed

0

In-Progress

No residential street plowing in progress

Sectors Completed

0

Sectors Not Started

61

Delays

Currently no delays!

2024-2025 Plan: Bright Ideas

