
2017-2018 Integrated Snow Response Plan



City of Commerce City
Public Works
2017-2018/General Edition Issue

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2017-2018 Integrated Snow Response Plan

Commerce City's Integrated Snow Response Plan is designed to make efficient use of crew time and conserve materials and equipment during winter storm events. Staff members from Street Maintenance, Fleet Maintenance and Park Maintenance Divisions are integrated into this plan in order to maximize resources. Through proper management, our efforts will translate into cost savings for the public, and a healthier/safer city in which to live, work, and drive.

Primary Goal:

To provide fiscally responsible service during snow and ice events that support the safety and mobility of our transportation system by removing or displacing snow and ice from all designated priority streets, parking areas, trails, and City-maintained sidewalks as safely and expeditiously as possible.

Ordinances and Regulations:

- Section 6-2013(b). *Snow and ice*. It shall be unlawful for the owner or occupant of any building, property or lot in the city to fail to remove the accumulation of snow, sleet, hail or ice from the sidewalks adjacent to such property, including those on public rights-of-way, within twenty-four (24) hours from the last accumulation of such snow, sleet, hail or ice. It shall further be unlawful for any person, other than an employee or agent of the city, to deposit, any snow, sleet, hail or ice against any fire hydrant, official traffic control device or other appurtenance, or onto any public or private property that is not owned by, occupied by or otherwise under the legal control of the person without the express consent of the owner or occupant of the property.
- Severe winter blizzards will be managed in accordance with The Code of Ordinances of the City of Commerce City, Chapter 23, entitled "Emergency Operations Plan."

Unified Response Time Objectives:

Streets

- Crews and equipment will be engaged in snow and ice removal operations on designated priority streets within one hour after the Street Division Operations Supervisor receives the call for service from the Police Department.

Fleet

- The on-call Mechanic will have one hour to respond to the Fleet facility.

Parks

- Crews and equipment will be engaged in snow and ice removal on parking areas, trails, and City-maintained sidewalks within one hour after a request for service is received from the Police Department or Street Division Operations Supervisor.

Staff Utilization:

- The Street Division's primary responsibility is to maintain City streets in a manner consistent with the overall program.
- The Fleet Division's responsibility is to maintain all city vehicles and equipment related to snow and ice operations and emergency management.
- The Parks Division's primary responsibility is to maintain City facility sidewalks, parking lots, and trails in a manner consistent with the overall program.

Staff Training:

- Each Division is responsible for managing their own staff and equipment to ensure adequate resources are available to meet the 2017-2018 Primary Goal and Objectives.
- Cross training opportunities will be made available to ensure Fleet and other Public Works staff is properly trained to operate the large plow trucks. The Fleet Division and other Public Works Divisions will be responsible for coordinating with the Street Division's Supervisor to schedule training. Prior to operating said equipment on City streets, operators must ride with a Street Division Foreman or Supervisor and demonstrate safe and proficient operation of the equipment.
- Cross-training opportunities will be made available to ensure Parks staff is properly trained to operate the large plow trucks. The Parks Division will be responsible for coordinating resources, and training their staff in the safe and effective operation of a large plow truck. Prior to operating said equipment on City streets, operators must ride with a Street Division Foreman or Supervisor and demonstrate safe and proficient operation of the equipment.

Snow Operations Preparation:

- When a snow event is forecasted the Street Division will go into snow operation mode. This means all Street staff will be assigned to thoroughly check snow plow trucks and all other snow related equipment.

Priority Street Designations:

- Priority #1 Streets: Major arterials considered to be the minimum network, which must be kept open to provide a transportation system connecting hospitals, fire stations, police stations, and other emergency units.
- Priority #2 Streets: All remaining arterials and selected collectors completing the network covering the major traffic volume streets or providing access to schools.
- Priority #3 Streets: All remaining collectors, bus routes, and hilly areas.
- Priority #4 Streets: Streets primarily located in residential areas. Priority #4 streets are plowed only when snow accumulations completely block traffic movement.

Priority Parking Areas, Trails, and Sidewalks:

- Priority #1: Police Department, Civic Center, Derby parking areas, Municipal Services Center, Recreation Center, and Center Community Center.
- Priority #2: The Derby District and Resource Center.
- Priority #3: All City parks sidewalks and parking areas.

Storm Classifications:

There are three levels of response to snow and ice removal, depending on the severity of the storm. The following classifications are intended to serve as a guide to establish effective snow removal strategies for different types of winter storms:

- Class #1 Storm: A storm predicted to last for less than 12 hours with anticipated snow accumulations of 4 inches or less.
 - Under this storm classification, maintenance teams will perform snow removal on Priority #1, Priority #2, and Priority #3 streets. Every attempt will be made to clear snow from all travel lanes of Priority #1 and Priority #2 streets, and provide at least one treated travel lane on Priority #3 streets.
- Class #2 Storm: A storm predicted to last for more than 12 hours with anticipated snow accumulations of between 4 and 8 inches.
 - Under this storm classification, maintenance teams will concentrate on removing snow and ice from Priority #1 and Priority #2 streets. After the storm has subsided, or when sufficient clearing of the Priority #1 and Priority #2 streets has occurred, maintenance teams will plow and de-ice Priority #3 streets.
- Class #3 Storm: A storm predicted to be extreme in nature with snow accumulations on road surfaces at depths greater than 8 inches, accompanied with strong or gusting winds that create drifting and expected to last for 24 hours or more.
 - Under this storm classification, snowfall may be so heavy that only Priority #1 streets can be maintained in a passable condition until the storm subsides. After sufficient clearing of Priority #1 streets, maintenance teams will plow and sand all Priority #2 streets and then proceed to Priority #3 streets.

Full deployment levels will be maintained as long as road conditions warrant and forecasts for additional snow remain in effect. Crews will be released to their regular shifts when acceptable service levels are reached and forecasts change to indicate the storm is over.

Emergency Response:

- The Public Works and Parks Division will provide resources to aid in snow removal on City streets when the Emergency Snow Plan has been activated, and/or the EOC has been activated and is requesting additional resources and will take direction for the Incident Commander.

Street Plowing and Treatment Objectives:

- Each individual snow storm presents unique conditions and challenges that warrant different approaches to snow and ice control. Factors such as wind, moisture content of the snow, pavement temperature, ice build-up on road surfaces, and projected snow accumulations all influence snow fighting strategies.
- Normal operating procedures involve plowing and spreading de-icing materials from the center to the right side of the road. The first crew dispatched for a storm may apply de-icing materials to the entire road surface in an effort to prevent ice from bonding to the pavement. Plowing will begin when sufficient snow accumulations occur on the road surface.
- Subsequent crews will adjust techniques in order to meet conditions. De-icing adjustments are made in the field based on current and forecasted conditions. Field adjustments may include: applying additional de-icing materials to the entire road surface or limiting them to icy spots,

intersections, stop signs, hills, and bridges. The Operations Supervisor will recommend techniques to be deployed based on storm conditions and duration to achieve optimal results and ensure the safety of motorists.

- In order to provide service to as much of the community in as timely a manner as possible, service will not include removal of the plowed windrows from driveways, sidewalks, mailboxes, along vehicles parked on the street, or at fire hydrants. There will be an adequate attempt made to keep these areas clear of snow, but in the event that the windrows are in these areas it will be the responsibility of the property owner to remove it. Refer to ordinance and regulations section.

Snow Removal Notification:

Streets

- The Street Division Operations Supervisors contact information will be provided in an email sent to the following Global Address List in Outlook: "List - Snow Removal Notification" when Street crews are placed on the on-call status.
- Refer to the Snow & Ice matrix for planning protocols.

Parks

- The Parks Division Operations Supervisor's contact information will be provided in an email sent to the following Global Address List in Outlook: "List - Snow Removal Notification" when Park crews are placed on the on-call status.

Parking Lot, Sidewalk, and Trail System Treatment Methods:

- The plowing of City parking lots, sidewalks, and trails are also performed on a priority system. The order of locations in which snow removal operations are engaged may vary according to the time of day and magnitude of the storm. If City offices are closed and business is unaffected by a storm, some parking areas may be considered "non-essential." This strategy allows maintenance staff to focus their efforts on locations that dispatch emergency equipment and provide parking areas for emergency staff. Sufficient ingress/egress to all emergency facilities will be provided first, followed by a thorough and methodical clearing of all parking lots.
- Plowing operations will be continued until all prescribed parking areas and entrances are adequately cleared to allow sufficient vehicle parking. All emergency and law enforcement parking lots and driveways will be plowed as close to bare pavement as possible. De-icing materials will be applied to parking surfaces to provide increased traction through drive areas, as required.
- In parking areas where on-site storage is limited, a minimum number of parking spaces may be used to store snow. When snow stacking becomes too great, snow may be removed and hauled away by the Streets Division at the discretion of the Public Works Operations Manager.
- Plowing in parking areas will be performed in a manner that does not create windrows in front of driveway entrances. Special care will be taken to prevent snow from being pushed into drive lanes of adjacent roadways.
- Sidewalk areas around the Civic Center, Recreation Center, Police Department, and Municipal Services Center will be treated as a Priority #1 and cleared during the storm to provide safe

access for employees and customers. Sidewalks around City-maintained parks and trails will be cleared within 24 hours of the end of the storm according to City ordinance.

Parking lots, sidewalks, and trail systems will be prioritized as follows:

- Class #1 Storms: Parking lots designated as Priority #1 will receive immediate attention, followed by Priority #2, #3, and #4.
- Class #2 Storms: Parking lots designated as Priority #1 and #2 will be given immediate attention, followed by Priority #3 and #4.
- Class #3 Storms: Parking lots designated as Priority #1 will receive the greatest concentration of snow removal effort to facilitate the dispatching of emergency response units and/or law enforcement personnel. During such storms, service to parking lots, sidewalks, and trails designated as Priority #2, #3 and #4 will be delayed.
 - Once the storm has subsided to the point that “re-stacking” (or continued accumulation) is no longer a factor, Priority #2, #3 and #4 will be effectively attended to.

Compensation:

- All work relating to snow and ice control in excess of 8 hours in a 24-hour period, during the normal business week, will be compensated at time and one-half. Snow and ice removal performed on weekends or City-observed holidays will also be compensated at the time and one-half rate. Employees can choose to be paid for the overtime worked or they can receive compensatory time for the hours worked.

On-call:

- Employees are compensated for being on-call at the rate of 1-hour of straight time for every 12 hours on-call, and 1.25-hours of straight time for every 12 hours on-call on weekends and City-observed holidays. When on-call hours are computed, they will be rounded up to the nearest quarter number and paid accordingly. When placed on-call, compensation is paid from the time an employee leaves work until the time they are required to report back to work as directed by their supervisor.
- On-call compensation ceases when the employee is on duty. Unlike compensatory time, on-call time must be computed and paid each pay-period.
- Crew members are entitled to a paid half-hour “lunch” break after working 5 hours and a 15-minute break for each 4 hour period worked during a 12-hour shift.
- Lunch and breaks will be coordinated and approved by the Operations Supervisor to ensure adequate staff remains on City roads to perform snow removal operations effectively.

Leave Use:

- Given the minimum amount of staff available to perform snow removal operations, only two Street Division staff can be scheduled for leave at the same time.
- Only one Fleet Division Mechanic employee at a time can be scheduled for leave.
- A shared online calendar will be utilized by all staff for displaying approved leave.

- Employees must submit a leave request to the Supervisor and be granted approved leave prior to their name being placed on the leave calendar. Fleet and Streets will utilize their specific Supervisor to gain approval prior to being placed on the calendar.
- Leave request conflicts will be resolved by the Public Works Operations Supervisor and/or Fleet Supervisor; conflicts will be resolved based upon seniority.
- In order to sustain necessary levels of productivity and service, if a situation occurs in which a crew member is not able to work or be on-call the crew member must contact their appropriate supervisor immediately so a substitute can be notified. These occurrences will be documented and tracked, repetitive unexcused absence may result in disciplinary action.

Unexpected Storm(s):

Streets

- Refer to the Snow Removal Matrix

Street Division On-Call Procedure:

- A crew rotation list has been established for the 2017-2018 snow removal season. Crews will be rotated at 7:00 a.m. on the first Monday of each pay-period in accordance with the schedule.
- When a storm is forecasted, the appropriate snow crew or crews will be placed on-call at the discretion of the Operations Manager or designee, and will receive on-call compensation; refer to the Snow Removal Matrix

Parks Division On-call Procedure:

- When placed on-call the Parks Division Operations Supervisors contact information will be provided in an email sent to the following Global Address List in Outlook; "List - Snow Removal Notification" when Street crews are placed on the on-call status.

Fleet Division On-call Procedure:

- A crew rotation list has been established for the 2017-2018 snow removal season. Crews will be rotated at 7:00 a.m. on the first Monday of each pay-period in accordance with the schedule.
- When a storm is forecasted, the appropriate snow crew or crews will be placed on-call at the discretion of the Streets Operations Manager or designee, and will receive on-call compensation; refer to the Snow Removal Matrix.
- When placed on-call the Fleet Division Supervisor contact information will be provided in an email sent to the following Global Address List in Outlook; "Mechanic on-call" when Street crews are placed on the on-call status.

Snow Support:

- Snow support time will be provided to night-shift employees to cover their regularly scheduled 8-hour work day. When placed on snow support employees must fulfill their 8 hours of actual work time before being compensated at an overtime rate. If storms do not materialize as

predicted, employees will be notified to not report for their scheduled shift and may be placed on-call.

- On-call pay is not paid in conjunction with snow support time. While on snow support time, staff are required to turn on and carry their city supplied cell phone. They may also be required to report to perform other duties as needed.

Fleet Procedures:

The Fleet team will work with the snow crews to provide them the necessary space and technical support during snow events and on-call times to ensure that all city equipment is operational and safe. When snow is in the forecast, the Street Division will be permitted to park four snow removal trucks in the center aisle of the Fleet facility. The side bays may be utilized for minor work and blade changes.

On-call Mechanic:

Two mechanics will be placed on call when the Streets snow crews are put on-call and will adhere to the same policy and plan as Streets personnel.

- They will be communicated with in the same manner as the on-call snow crew. The foreman in charge of the on-call crew will communicate with the on-call mechanic.
- Both mechanics will report to the Fleet facility when the on-call snow crews are called in.
- Vehicles and Equipment will be worked on in the following priority level.

1. Equipment related directly to snow operations

Large plows will be repaired first, small plow and snow blowers will be looked at second.

2. Police and Emergency Management equipment

3. If no snow or emergency equipment is needing repair mechanics are expected to stay busy completing other repair work within the shop.

- Mechanics are entitled to a paid half-hour “lunch” break after working 5 hours and a 15-minute break for each 4 hour period worked during a 12-hour shift. The time of these breaks will be at the discretion of the mechanics due to work load and necessary repairs, unless they are assisting with plowing, at which point they will coordinate with the foreman.
- If it is determined that there is a need to have a mechanic assist in plow operations they will both be assigned to the same unit and will be assigned to the area closest to the Public Works Facility. This will allow for a quicker response back to the shop when repairs are needed.

Prior to a Storm:

- Street Division foreman and supervisors are required to contact the Fleet Supervisor staff prior to parking snow removal trucks on-line to allow the necessary time for the area to be set up.
- Street Division staff will park four snow removal trucks inside the Fleet facility no earlier than 2:45pm
- Plows should be grounded, vehicles turned off, and keys left in the ignition
- In the event that a storm did not materialize as predicted, or snow crew were not needed:
 - Fleet Division staff will remove trucks from the Fleet facility and park them back on the Streets line with the plow down and plugged in.

During the Storm:

- Street Division staff may use the Fleet facility to change plow edges or perform minor maintenance.
- Street Division staff will obey all shop rules and provide a list of any parts used for maintenance of the trucks
- Street Division staff should attempt to isolate and/or minimize the area used for such maintenance in order to confine any mess to one section of the facility. This will also ensure that daily operations within the Fleet facility can run as normal.
- An effort will be made by Streets staff to assist in the cleanup of any deicer, water or slush left from the trucks.
- Trucks pulled out of service by either the snow crew foreman or on-call fleet technician will be parked outdoors, with the block heater plugged in.
- Any towed vehicle should be parked on the line.
- Operators are responsible for communicating amongst one another and advising their supervisor if a vehicle is out of service – a work order should be generated immediately and placed on in the vehicle.

Conclusion of the Storm:

- Snow removal trucks should be filled with fuel, de-icing materials emptied, vehicles parked in their assigned locations, block heaters plugged in and plows grounded.
- Each plow operator is responsible for checking the electrical connections on their assigned vehicle to ensure proper operation of the engine block heaters
- All operators will perform a post-trip inspection noting any deficiencies to the equipment and turn in a work order.
- It is imperative that any trucks loaded with de-icing materials be emptied and washed as soon as possible after a snow event. This includes a thorough cleaning of the exterior of the truck and truck chassis, as well as the plow and the interior and exterior of the sander.
- It is imperative that all of the plow trucks are plugged in, electrical cords kept off the ground and breakers checked at the end of each shift. It is also imperative that extension cords are kept rolled up and off of the ground when not in use.

Street Division Snow Equipment:

Quantity:	Description:
10	Tandem dump trucks with sanders and plows
1	Single axle dump trucks with sander and snowplow
1	John Deere TC 54h rubber tire loader with loader bucket
1	Motor grader with 10-foot v-plow
1	Case skid steer
1	Case 4-wheel drive loader/backhoe
4	1-ton trucks with plows and sanders

Parks Division Snow Equipment:

Quantity:	Description:
1	John Deere 310-D loader/backhoe
1	Massey Ferguson 1250 tractor/loader
1	John Deere skid steer
5	1-ton 4x4trucks with plows and sanders
2	1-ton trucks with plows
3	Ford Ranger 4x4 trucks with plows
2	Toro mowers with mounted v-plows & cab
3	Toro mowers with mounted angle plows & cab
3	Large Toro walk-behind snow blowers
3	Small Toro walk-behind snow blowers

Materials:

Ice-slicer will be used as a de-icing agent to melt snow and ice. Application rates will be based upon specific weather and road conditions, as well as Operations Supervisors recommendations. The Street Division's goal is to achieve maximum melting of snow and ice in a cost effective and environmentally responsible manner.

De-icing materials are stored at: 8602 Rosemary Street.

Snow Plow Checklist

Name(s):		Date:
Unit #	Time spent working on truck	
Items:		
Engine Oil/Battery + Connections		
Radiator Fluid		
Power Steering Fluid		
Transmission Fluid		
Windshield Wipers/Fluid in tank		
Check/Clean all lights, mirrors and windows (Plow, sander and head lights)		
Check Tires		
Check lug nuts		
Brakes/Parking Brake (Make sure shut off valve on air tanks are closed)		
Plow Connections – (Leaks, tightness, pins, and all connections)		
Plow blades (wear, tightness, cracks on dog bones)		
All hydraulic levels – Plow, sander, dump body. (Check control valve for leaks)		
Seatbelts		
Engine belts (check adjustment/wear)		
Check all hoses for wear, leaks and soft spots		
Master cylinder		
Sander conveyor, spinner (wash and grease all zerks and fill chain reservoir)		
Check tightness of conveyor chains		
Check chains on one ton for proper adjustment and wear		
License plate, sander straps, shovel and condition of mud flaps		
Make sure snow brush, snow logs, hammer and maps are in truck		
Wash truck, park online, check extension cord for cracks/cuts and ensure vehicle is properly plugged in		

Street Division Snow Removal Log:

2017 – 2018 Snow Removal Log	
Date:	
Driver:	
Unit:	
Finish Miles:	
Start Miles:	
Total Miles:	
District:	
Time Called:	A.M. P.M. (Circle one)
Time at MSC:	A.M. P.M. (Circle one)
Time on Street:	A.M. P.M. (Circle one)
Hours Worked:	
Priority #1 Initial Pass Completed:	A.M. P.M. (Circle one)
Priority #2 Initial Pass Completed:	A.M. P.M. (Circle one)
Priority #3 Initial Pass Completed:	A.M. P.M. (Circle one)

2017-2018 Snow Season
Snow and Ice Control Program
Levels of Service

Levels of Service:

Objective: Primary crews and equipment engaged in snow and ice removal operations on designated priority streets within one hour after the call for service is received from the Police Department by the Operations Supervisor.

Time/Date Called: _____

Time/Date In Service: _____

Objective Met: _____

Storm Type:☐ Class #1 ☐ Class #2 ☐ Class #3

Class #1 Storm Objective: Clear snow from all travel lanes of Priority #1 and #2 streets, and provide at least one treated travel lane on Priority #3 streets.

Objective Met: _____

Time: _____

Date: _____

Class #2 Storm Objective: Provide sufficient clearing of Priority #1 and #2 streets during the course of the storm and then plow and de-ice Priority #3 streets.

Objective Met: _____

Time priorities #1 & #2 completed: _____

Date: _____

Class #3 Storm Objective: Maintain Priority #1 streets in a passable condition until the storm subsides and then proceeds to Priority #2 and #3 streets.

Objective Met: _____

Time #1 priorities completed: _____

Date: _____

Total miles maintained: _____

Tons of mix applied: _____

Tons of alternative deicers: _____

Unit # of Equip. Used	Date Cleaned	Date of Post-use Inspection and/or Work Order	Description of Work Order

Additional Comments:

Signature

Date

In the case of an Accident:

1. Stop immediately, set reflectors and flares (as required).
2. Protect yourself and others involved, aid the injured to protect them from further injury. Do not move injured people, unless they are in a life-threatening situation.
3. Report all accidents immediately; first to police, and second to the Snow Removal Foreman. Wait until the other party hangs up before hanging up yourself.
4. Exchange necessary information with other drivers, including name, business phone, addresses, insurance information, and license number.

Carefully and completely prepare the Driver's Report portion of the form provided in the glove compartment of each vehicle, both sides, and submit to your supervisor.

City Maintained Parking Areas and Trails:

Area:	Priority:
Police Department Parking Entrance	#1
Civic Center	#1
Derby Parking Areas	#1
M.S.C. Parking Lot - 8602 Rosemary Street	#1
Recreation Center - 6060 Parkway Drive	#1
Conter Community Center - 60th & Holly	#2
Derby District Resource Center - 7270 Monaco St.	#2
Pioneer Park 5902 Holly Street	#3
All City Parks Sidewalks and Parking Areas	#3
Fernald Trail Head Parking Lot - 70th & Colorado Boulevard	#3
Fernald Trail - West from Colorado Boulevard	#3
Bike Trail - West from Colorado Boulevard	#3
Bike Trail & Underpass - Fairfax Park West to Hwy 2	#3
Bike Trail - 49th Street West to Platte River Bridge	#3
Dahlia Trail Head - Sand Creek and Dahlia Street	#4
Service Center Sidewalks - 7450 Highway 2	#4

2017-2018 Snow Removal Districts:

Area:	Street Name:	From:	To:	Priority:	# of Lanes	Lane Miles:
District 1						
	49th Ave./Dr.	Sand Creek Dr. S	50 th Ave.	1	2	1.50
	Ivy St.	50th Ave.	52nd Ave.	1	2	0.46
	56th Ave.	Quebec Pkwy.	Highway 85	1	4	7.16
	56th Ave.	Highway 85	Brighton Road	1	2	1.60
	60th Ave.	Highway 85	Quebec St.	1	2	3.00
	Monaco St.	56th Ave.	60th Ave.	1	2	0.33
	York St.	Brighton Blvd.	58th Ave.	1	2	0.58
	50th Ave.	49th Dr.	Ivy St.	1	2	0.20
	Holly St.	56th Ave.	60th Ave.	2	4	0.64
	52nd Ave.	Ivy St.	Colorado Blvd.	2	2	2.03
	Dahlia St.	50th Ave.	56th Ave.	2	2	1.43
	60th Ave.	Brighton Blvd.	Highway 85	2	2	0.53
	48th Ave.	Pontiac St.	Forest St.	2	2	2.16
	50th Ave.	Pontiac St.	49th Dr.	2	2	1.48
	Pontiac St.	48th Ave.	50th Ave.	2	2	0.50
	Ivy St.	48th Ave.	50th Ave.	2	2	0.46
	Bowen Ct.	56th Ave.	Niagara St.	2	2	0.28
	Niagara St.	Bowen Ct.	56th Ave.	2	2	0.10
	Eudora St.	56th Ave.	58th Ave.	2	2	0.48
	Dahlia St.	60th Ave.	58th Ave.	2	2	0.58
	58th Ave.	Dahlia St.	Quebec St.	2	2	3.45
	Oneida St.	58th Ave.	60th Ave.	2	2	0.48
	Olive St.	56th Ave.	60th Ave.	2	2	0.32
	58th Pl.	Dahlia St.	Glencoe St.	3	2	0.51
	Glencoe St.	58th Pl.	58th Ave.	3	2	0.11
	53rd Pl.	Quebec St.	Newport St.	3	2	0.65
	54th Pl.	Quebec St.	Newport St.	3	2	0.65
	Newport St.	56th Ave.	Sand Creek Drive N.	3	2	0.90
	Sand Creek Dr.	Newport St.	Krameria St.	3	2	0.88
	Kearney St.	56th Ave.	55th Ave.	3	2	0.23
	Krameria St.	56th Ave.	Sand Creek Drive N.	3	2	0.45
	Leyden St.	56th Ave.	55th Ave.	3	2	0.23
	Locust St.	56th Ave.	55th Ave.	3	2	0.23
	Monaco St.	56th Ave.	55th Ave.	3	2	0.23
	Magnolia St.	56th Ave.	Sand Creek Drive N.	3	2	0.80
	Niagara St.	56th Ave.	Sand Creek Drive N.	3	2	0.80
	55th Ave.	Kearney St.	Monaco St.	3	2	0.44
			Subtotal:			36.86

Area:	Street Name:	From:	To:	Priority:	# of Lanes	Lane Miles:
District 2						
	62nd Ave.	Highway 85	Holly St.	1	2	0.91
	72nd Ave.	Colorado Blvd.	Quebec Pkwy.	1	5	6.13
	Monaco St.	72nd Ave.	60th Ave.	1	2	2.70
	Parkway Dr.	Highway 85	62nd Ave.	1	5	3.15
	Holly St.	Highway 2	60th Ave.	1	2	0.71
	68th Ave.	Colorado Blvd.	Brighton Blvd.	2	2	0.86
	Colorado Blvd.	Brighton Blvd.	74th Ave.	2	2	3.15
	69th Ave.	Cherry St.	Holly St.	2	2	1.13
	Cherry St.	69th Ave.	70th Ave.	2	2	0.26
	Fairfax Dr.	69th Ave.	72nd Ave.	2	2	0.77
	64th Ave.	Highway 2	Quebec Pkwy.	2	4	5.80
	62nd Ave.	Holly St.	Quebec Pkwy.	2	2	2.00
	66th Wy.	Highway 2	Holly St.	2	2	0.22
	67th Pl.	Monaco St.	Niagara St.	2	2	0.25
	67th Pl.	Oneida St.	Quebec St.	2	2	0.49
	68th Ave.	Niagara St.	Oneida St.	2	2	0.15
	69th Ave.	Highway 2	Niagara St.	2	2	1.27
	70th Ave.	Monaco St.	Quebec St.	2	2	0.99
	Kearney St.	69th Ave.	60th Ave.	2	2	2.23
	Niagara St.	67th Pl.	68th Ave.	2	2	0.12
	Niagara St.	68th Ave.	72nd Ave.	2	2	0.94
	Olive St.	70th Ave.	60th Ave.	2	2	0.84
	Oneida St.	68th Ave.	67th Pl.	2	2	0.09
	Poplar St.	72nd Ave.	70th Ave.	2	2	0.45
	Ash St.	68th Ave.	70th Ave.	3	2	0.49
	70th Ave.	Colorado Blvd.	Brighton Blvd.	3	2	1.06
	63rd Pl.	Kearney St.	Monaco St.	3	2	0.49
	63rd Pl.	Holly St.	Ivy St.	3	2	0.24
	66th Pl.	Kearney St.	Monaco St.	3	2	0.46
	Demott St.	Holly St.	Kearney St.	3	2	0.47
	Ivy St.	64th Ave.	63rd Pl.	3	2	0.12
			Subtotal:			38.82
Area:	Street Name:	From:	To:	Priority:	# of Lanes	Lane Miles:
District 3						
	88th Ave.	I-76	Rosemary St.	1	2	1.20
	88th Ave.	Rosemary St.	Highway 2	1	3	2.82
	Rosemary St.	Highway 2	88th Ave.	1	2	1.97
	Quebec Pkwy.	Highway 2	56th Ave.	1	5	15.39
	Prairie Pkwy.	Quebec Pkwy.	Victory Wy.	1	3	2.11
	Valentia St.	59th Pl.	56th Ave.	1	4	1.63
	56th Ave.	Valentia St.	Quebec Pkwy.	1	5	3.03

	Trenton St.	60th Ave.	Prairie Pkwy.	1	2	0.25
	60th Ave.	Trenton St.	Quebec Pkwy.	1	2	0.76
<i>Derby</i>						
	Magnolia St.	72nd Ave.	Highway 2	2	2	0.52
	Monaco St.	Highway 2	72nd Ave.	2	2	0.36
	Locust St.	Highway 2	72nd Ave.	2	2	0.20
	73rd Ave.	Magnolia St.	Monaco St.	2	2	0.12
	E. 72nd Pl.	Magnolia St.	Highway 2	2	2	0.34
	Quebec St.	80th Ave.	81st Ave.	1	2	0.37
	81st Ave.	Rosemary St.	Quebec St.	1	2	0.37
	Oneida St.	72nd Ave.	Highway 2	2	2	0.89
	73rd Ave.	Oneida St.	Quebec St.	2	2	0.49
	74th Ave.	Oneida St.	Magnolia St.	2	2	0.27
	Newport St.	74th Ave.	Highway 2	2	2	0.11
	Victory Wy.	Prairie Pkwy.	59th Pl.	2	2	0.37
	59th Pl.	Trenton St.	Valentia St.	2	2	0.45
	Trenton St.	59th Pl.	60th Ave.	2	2	0.17
	60th Ave.	Trenton St.	Victory Wy.	2	2	0.29
	Quebec St.	73rd Ave.	72nd Ave.	2	2	0.24
	86th Ave.	Quebec St.	Rosemary St.	3	2	0.12
	72 nd Place	Oneida St.	Magnolia St.	2	2	0.27
	84th Ave.	Quebec St.	Rosemary St.	3	2	0.12
	Quebec St.	81st Ave.	86th Ave.	3	2	1.05
			Sub Total:			36.28
Area:	Street Name:	From:	To:	Priority:	# of Lanes	Lane Miles:
District 4						
	Hwy 2	104 th Ave	120 th Ave	1	2	5.36
	120th Ave.	Hwy 85	Tower Rd.	1	2	9.18
	Tower Rd.	120 th Ave	104th Ave.	1	2	4.02
<i>Outlook</i>						
	Jasper St.	120th Ave.	121st Ave	2	2	0.24
	121st Ave.	Chambers Rd.	Laredo St.	2	2	1.11
	Laredo St.	121st Ave.	119th Ave.	2	2	0.49
	Chambers Ave.	120th Ave.	121st Ave	2	2	0.24
	Hannibal St.	121st Ave.	122nd Ave.	3	2	0.24
	122nd Ave.	Hannibal St.	Village Cir.	3	2	0.67
	Village Cir.	121st Ave.	122nd Ave.	3	2	0.24
<i>Buffalo Run East:</i>						
	117th Ave.	Chambers Rd.	Jasper St.	2	2	0.43
	Jasper St.	117th Ave.	120th Ave.	2	2	0.77
	119th Ave.	Jasper St.	Chambers Rd.	2	2	0.49

<i>Village at Buffalo Run</i>						
	117th Ave.	Chambers Rd.	Fairplay St.	2	2	0.40
	Fairplay St.	117th Ave.	Cameron Dr.	2	2	0.64
	118th Pl.	Fairplay St.	Chambers Rd.	2	2	0.40
	Cameron Dr.	Fairplay St.	120 th Ave.	2	2	0.12
	119 th Ave	Fairplay St.	Elkhart St.	1	2	0.44
	Elkhart St.	119th Ave.	118th Ave.	1	2	0.37
	118th Ave.	Elkhart St.	Fairplay St.	1	2	0.18
<i>Turnberry</i>						
	Revere St.	104th Ave.	Turnberry Pkwy.	2	2	0.91
	Turnberry Pkwy.	Hwy 2	106th Pl.	2	2	0.56
<i>Potomac Farms</i>						
	105th Wy.	Victor St.	Vaughn Wy.	2	2	0.11
	Vaughn Wy.	105th Wy.	104th Ave.	2	2	0.44
	104th Dr.	Vaughn Wy.	Uvalda St.	3	2	0.19
	Uvalda St.	104th Ave.	104 th Dr	2	2	0.24
	108th Ave.	Potomac St.	Wheeling St.	2	2	0.35
	Wheeling St.	106th Ave.	108th Ave.	2	2	0.42
	106th Pl.	Turnberry Pkwy.	Wheeling St.	2	2	0.44
<i>North Range Village</i>						
	Potomac St.	104th Ave.	108th Ave.	2	2	0.99
	Blackhawk Ave.	104th Ave.	105th Pl.	2	2	0.45
	105th Pl.	Blackhawk Ave.	Abilene St.	2	2	0.45
	106th Ave.	Potomac St.	Abilene St.	2	2	0.50
			Subtotal:			30.89
Area:	Street Name:	From:	To:	Priority:	# of Lanes	Lane Miles:
District 5						
	Hwy 2	64 th Ave	72 nd Ave	1	4	5.08
	Hwy 2	72 nd Ave	104 th Ave	1	2	10.72
	Heinz Way	96th Ave.	Havana St.	2	2	0.75
	102nd Ave.	Havana St.	Dallas St.	2	2	1.20
	Dallas St.	96th Ave.	102nd Ave.	2	2	1.30
	Yosemite St./Heinz Wy.	88th Ave.	96th Ave.	2	4	1.88
	Havana St.	96th Ave.	Joliet St.	2	2	2.12
	Joliet St.	Havana St.	104th Ave.	2	2	0.75
<i>Reunion North</i>						
	Parkside Dr. N.	110th Ave	Landmark Dr.	1	2	1.25
	Landmark Dr.	Richfield Ct.	Telluride St.	1	2	0.85
	Unity PKWY	Unity Ln.	Reunion PKWY	1	2	1.40

<i>Enclave</i>						
	97th Pl.	Dallas St.	Emporia St.	3	2	0.32
	99th Pl.	Dallas St.	Emporia St.	3	2	0.32
	Emporia St.	97th Pl.	99th Pl.	3	2	0.40
	Yosemite St.	96th Ave.	93rd Pl.	3	3	1.01
	93rd Pl.	Willow Ct.	Yosemite St.	3	3	0.59
	Willow Ct.	96th Ave.	93rd Pl.	3	3	0.96
	Ulster St.	84th Ave.	88th Ave.	3	2	1.14
	84th Ave.	Rosemary St.	Ulster St.	3	2	0.62
	Willow St.	88th Ave.	87th Ave.	3	2	0.24
	87th Ave.	Willow St.	Xenia St.	3	2	0.19
	Xenia St.	87th Ave.	88th Ave.	3	2	0.28
			Subtotal:			33.37
Area:	Street Name:	From:	To:	Priority:	# of Lanes	Lane Miles:
District 6						
	Brighton Road	104 th Ave.	120 th Ave.	1	2	4.16
	Peoria St./Pkw.	104th Ave.	120th Ave.	1	3	6.56
	112th Ave.	Peoria St.	Brighton Rd.	1	3	5.30
	Havana St.	104th Ave.	112th Ave.	2	2	2.30
	106th Ave.	Havana St.	Fulton St.	2	2	0.40
	Fulton St.	106th Ave.	107th Pl.	2	2	0.30
	107th Pl.	Havana St.	Fulton St.	2	2	0.40
	Havana St.	112th Ave.	120th Ave.	3	2	2.50
	Florence St.	104th Ave	106th Ave	2		
<i>River Run</i>						
	Oakland St.	112th Ave.	113th Ave	2	3	0.71
	113th Ave	River Run Pkwy	River Run Circle	2	2	0.82
	River Run Circle	Moline St.	119 th Ave	2	2	0.44
	Oakland St	114 th Ave	Oswego St	2	2	0.35
	Oswego St	115 th Dr	115 th Ave	2	2	0.61
	Jamaica Dr.	112th Ave	113th Ave.	2	2	0.24
	113th Ave.	Jamaica Dr.	114 th Ave	2	2	0.49
	114 th Ave	114th Ave	Kenton St	2	2	0.48
	Kenton St	114 th Ave	Kingston St	2	2	0.25
	Kingston St	Kenton St	116 th Ave	2	2	0.24
	116 th Ave	Kingston St	Jamaica St .	2	2	0.33
<i>River Oaks</i>						
	Lima St.	112th Ave.	River Oaks Lane	2	2	0.72
	River Oaks Lane	Lansing Ct.	Oswego St.	2	2	0.66
	Oswego St.	River Oaks Lane	Oakland St./111th Ave.	2	2	0.27
	Oakland St. (in & out)	111th Ave./Oswego St.	112th Ave.	2	2	0.18

<i>Stillwater</i>						
	Oakland Dr.	117th Ave.	118th Pl.	2	2	0.65
	118th Pl.	Oakland Dr.	Nome St.	2	2	0.11
	Nome St.	118th Pl.	119th Ave.	2	2	0.10
	119th Ave.	Nome St.	Moline St.	2	2	0.15
	Moline St.	119th Ave.	120th Ave.	2	2	0.19
	117th Pl.	Oswego St.	Oakland Dr.	2	2	
	119th Ave.	Peoria St.	120th Ave	3	3	0.73
	119th Ave.	Moline St.	119th Ave	2	3	0.25
<i>Belle Creek</i>						
	Belle Creek Blvd.	104th Ave.	112th Ave.	2	2	2.28
	Longs Peak Dr.	Beeler St.	Highway 85	2	2	0.45
	Beeler St.	Longs Peak Dr.	107th Ave.	2	2	0.08
	107th Ave.	Belle Creek Blvd	Akron St	2	2	0.27
	Akron St	107 th Dr	Beeler St	2	2	0.35
	Beeler St	109 th Pl	Dayton Way	2	2	0.37
	Dayton Way	Longs Peak Dr	Belle Creek Blvd	2	2	0.43
	Belle Creek Blvd	104 th Ave	112 th Ave	2	2	2.2
<i>Dunes Park</i>						
	112th Ct.	112th Ave.	112th Dr.	2	2	0.14
	112th Dr.	112th Ct.	Clinton St.	2	2	0.43
	Clinton St.	112th Dr.	113th Ave.	2	2	0.17
	113th Ave.	Clinton St.	Florence St.	2	2	0.54
	Florence St.	113th Ave.	112th Ave.	2	2	0.74
			Subtotal:			34.97
Area:	Street Name:	From:	To:	Priority:	# of Lanes	Lane Miles:
District 7						
	96th Ave.	Tower Rd.	E470	1	2	1.84
	96th Ave.	I-76	Tower Road	1	2	15.36
	Tower Rd.	80th Ave.	104th Ave.	1	2	5.08
	Tower Rd.	81st Ave	Dead End	2	3	0.86
<i>Eagle Creek</i>						
	Eagle Creek Pkwy	96th Ave.	Eagle Creek Cir	2	2	1.14
	Eagle Creek Cir	Eagle Creek Pkwy	96 th Ave	2	2	1.14
<i>Fronterra</i>						
	Chambers Rd.	96th Ave.	104th Ave.	1	2	2.00
	100th Ave.	Chambers Rd.	Laredo Dr.	2	2	0.46
	Idalia St./Joplin St.	100th Ave.	104th Ave.	2	2	1.05
	101st Wy.	Joplin St.	Lewiston St.	2	2	0.39
	Laredo Dr.	100 th Ave.	Laredo St.	2	2	0.48

	Laredo St.	99th Ave.	96th Ave.	2	2	0.70
	Jasper St.	96th Ave.	98th Ave.	2	2	0.50
	98th Ave.	Jasper St.	Chambers Rd.	2	2	0.44
	Nucla St.	96th Ave.	99th Ave.	2	2	0.64
	99th Ave.	Laredo St.	Nucla St.	2	2	0.39
<i>Harvest Meadows</i>						
	100th Ave	Chambers Rd	Altura St	2	2	0.08
	Altura St	100 th Ave	102 nd Ave	2	2	0.86
	102 nd Ave	Altura St	Fairplay	2	2	0.24
	101 st Ave	Chambers Rd	Fraser St	2	2	0.25
	Landmark Dr.	104th Ave.	Quintero St.	2	2	1.36
	Southlawn Pkwy.	Landmark Dr.	Southlawn Cir.	2	2	0.84
	Reunion Pkwy.	Southlawn Cir.	104th Ave.	2	2	0.53
<i>Foxton Village</i>	Blackhawk St.	104th Ave.	100th Ave.	2	2	1.00
	100th Ave.	Blackhawk St.	Dillon Cir.	2	2	0.33
	Dillon Cir.	100th Ave.	Sable Blvd.	2	2	0.22
<i>Reunion South</i>	Southlawn Pkwy.	Southlawn Cir.	Walden St.	2	2	0.44
	Walden St.	Southlawn Pkwy.	104th Ave.	2	2	0.72
	Quintero St.	Landmark Dr.	98th Way	2	2	0.13
	98th Wy.	Quintero St.	Telluride St.	2	2	0.47
	Telluride St.	98th Wy.	99th Ave.	2	2	0.09
	99th Ave.	Telluride St.	Reunion Pkwy.	2	2	0.09
	Reunion Parkway	99th Ave.	Southlawn Cir.	2	2	0.38
<i>Reunion South</i>	Southlawn Pkwy.	Southlawn Cir.	Walden St.	2	2	0.44
	Walden St.	Southlawn Pkwy.	104th Ave.	2	2	0.72
			Subtotal:			38.66
Area:	Street Name:	From:	To:	Priority:	# of Lanes	Lane Miles:
District 8						
	104 th Ave.	Joliet St.	E.470	1	4	10.48
	104 th Ave.	Joliet St.	Potomac St.	1	3	6.00
	Chambers Rd.	104th Ave.	120th Ave.	1	3	6.00
<i>Reunion North/Bufalo Mesa</i>	Kittredge St.	104th Ave.	105th Ave. (roundabout)	2	2	0.47
	Kittredge St.	(roundabout)	Heartland Dr.	2	2	0.47
	105th Ave.	Kittredge St.	Memphis St.	2	2	0.47
	Memphis St.	105th Ave.	Heartland Dr.	2	2	0.54
	105th Ave.	Memphis St.	Reunion Pkwy.	2	2	0.91
	Olathe St.	105th Ave.	106th Pl.	2	2	0.32
	106th Pl.	Olathe St.	Memphis St.	2	2	0.31

	Landmark Dr.	104th Ave.	Parkside Dr. North	2	2	1.05
	Reunion Pkwy.	Reunion Dr.	104th Ave.	2	2	0.32
	Reunion Pkwy.	Parkside Dr. N.	Reunion Dr.	2	2	0.55
	Reunion Dr.	Landmark Dr.	Reunion Pkwy.	2	2	0.99
	Heartland Dr.	Chambers Rd.	Landmark Dr.	2	2	0.71
	Parkside Dr. South	Landmark Dr.	Reunion Dr.	2	2	0.89
	105th Ave.	Reunion Pkwy.	Walden St.	2	2	0.92
	Walden St.	104th Ave.	105th Ave.	2	2	0.29
	Parkside Dr. North	Landmark Dr.	Reunion Pkwy.	2	2	0.75
	Parkside Dr North	111 th Ave	Rifle Ct	2	2	0.44
	Rifle Ct	Landmark Dr	Unity Ln	2	2	0.57
	Unity Ln	Reunion Pkwy	Parkside Dr South	2	2	0.61
			Subtotal:			34.06
			Grand Total:			283.91