

Snow Operations Discussion – Public Works 2020





Snow Operations - Overview

- Provide statistics and information about community assets
- Review of Public Works response for winter storm events
- Current policy and level of service
 - Streets
 - Parks
- Questions and Discussion



Urban Snow Operations

The goal for the Public Works Snow Operations program is to provide essential services and maintain the City transportation infrastructure to safest degree possible and limit mobility disruptions for all.



Streets and Parks Statistics

700 lane miles

16 miles of alleys

131 miles of bike lane

270 miles of sidewalk

56 miles of FUTS-24 miles paved 112 entrances

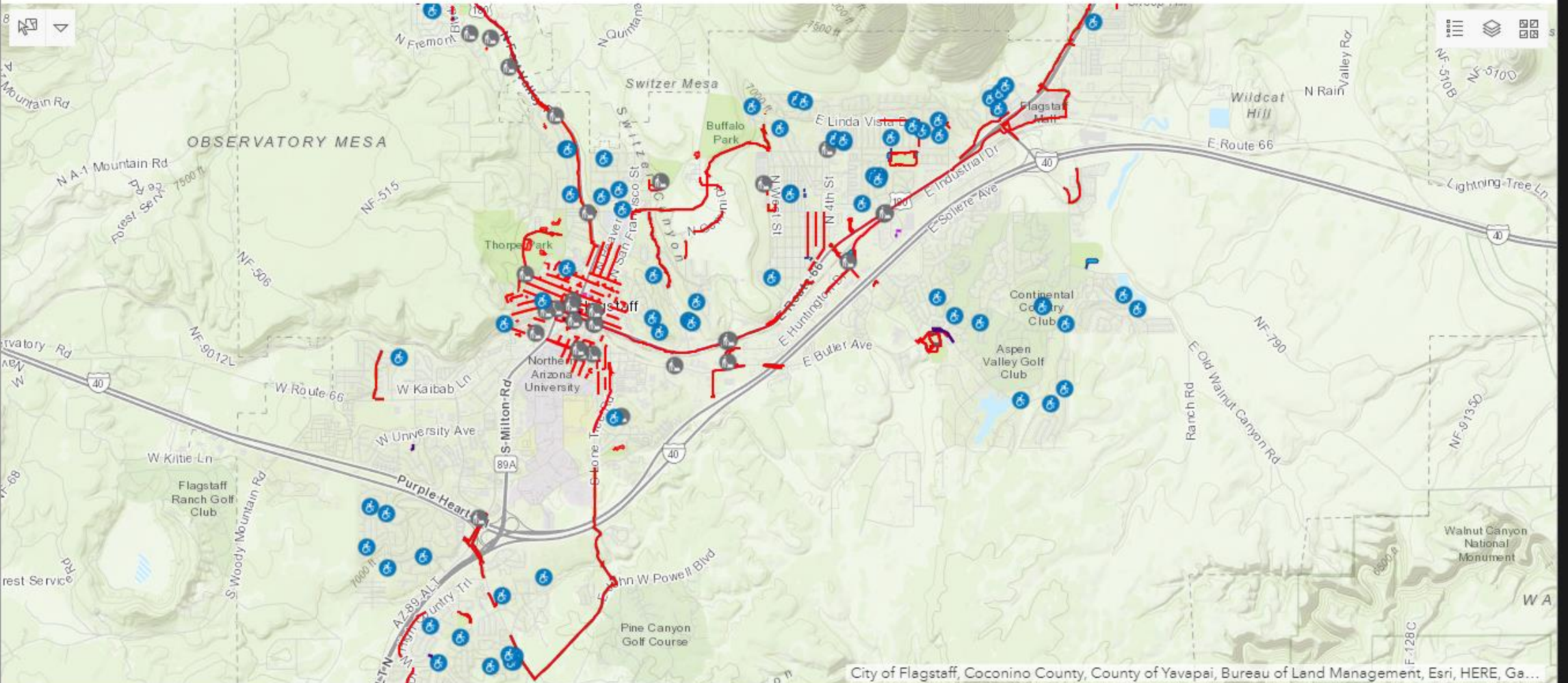
27,000 driveways



Community Statistics and Maps



Parks Snow Routes - Turn on/off layers to view routes






Community Statistics and Maps



City of Flagstaff
2018-2019
Snow Operations

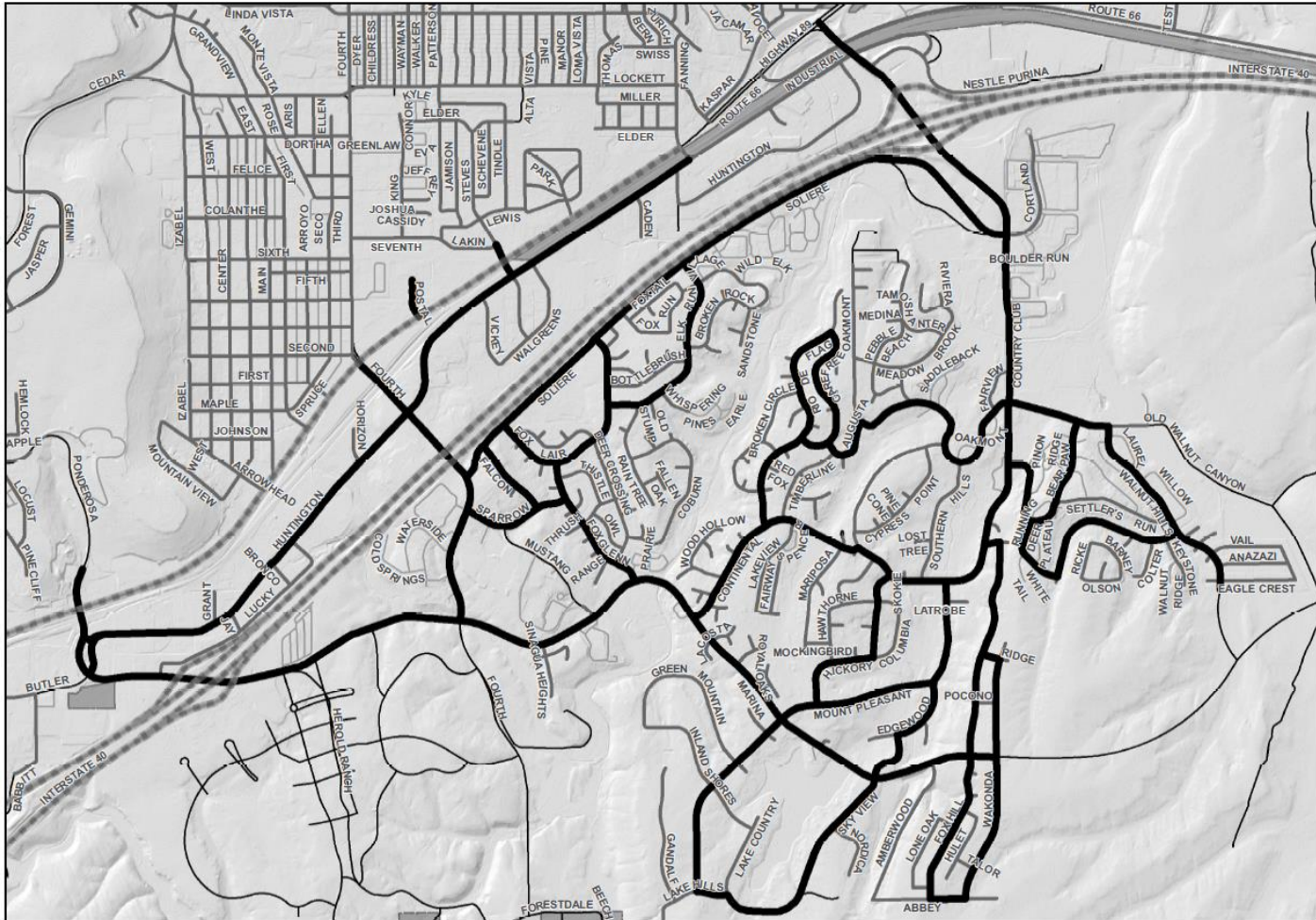
Grader 188

-  Grader/Truck Route
-  Other Graders and Trucks
-  ADOT Maintenance
-  City of Flagstaff
-  County Island





Community Statistics and Maps



City of Flagstaff
2018-2019
Snow Operations

Truck 54

- Grader/Truck Route
- Other Graders and Trucks
- ADOT Maintenance
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5
11/27/2018



Snow Operations

3 critical considerations with all weather events:

Timing

Texture

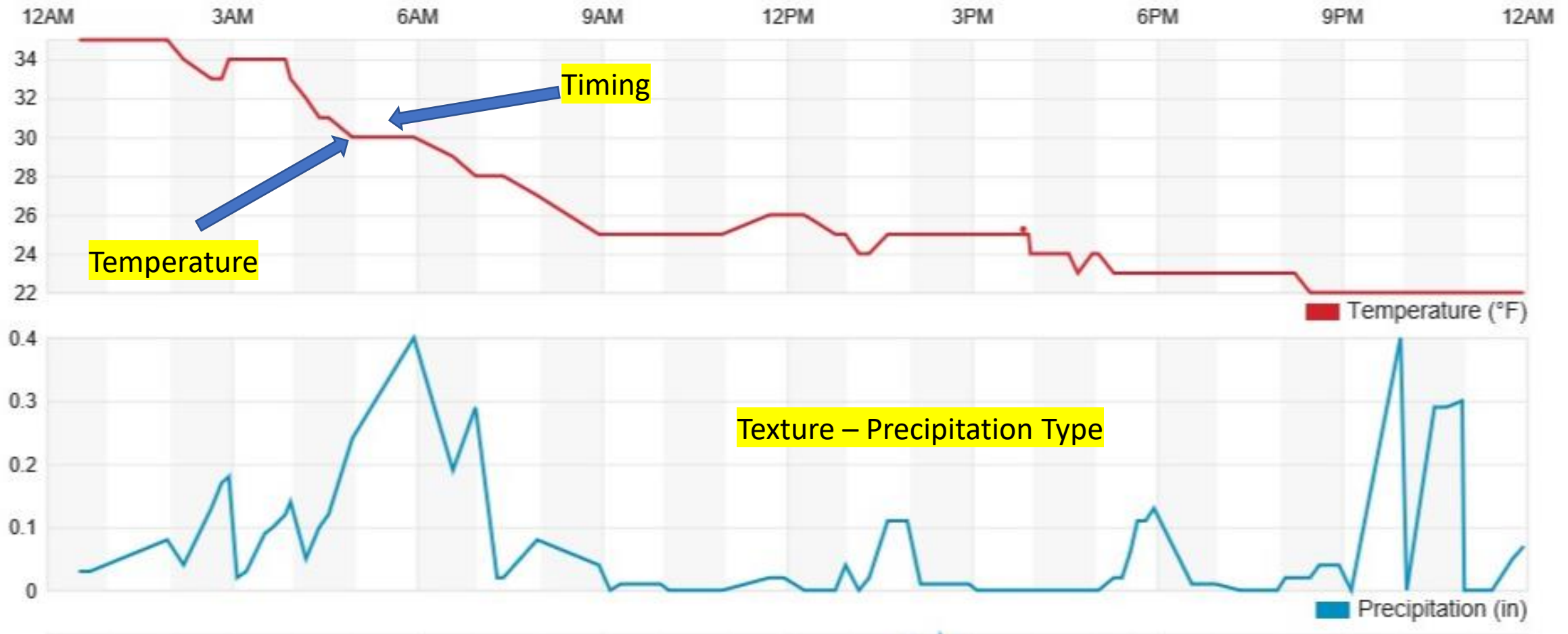
Temperature





Thanksgiving Event

November 29 2019 [View](#)





Snow Operations – Streets Overview

1. Storm Monitoring

- Weather reports and operations readiness

2. Equipment Preparation

- Snow plow/cinder truck fleet
- Grader and loader fleet

3. Operator Availability

- Full time staff of 18 operators, 3 supervisors and 1 acting supervisor
- Temp staffing if available (4-12 typical)
- 12-hour shifts for duration of storm event



Snow Operations – Parks Overview

1. Storm Monitoring

- Weather reports and operations readiness
- Impeccable communication with Streets

2. Equipment and Tool Preparation

- Snow plow/cinder truck fleet
- Backhoe and bobcat fleet
- Shovel, gloves, gaiters, outerwear

3. Operator and Shovel Availability

- Full time staff of 13 operators, 9 shovelers, 4 supervisors,
- Contracted personnel (4-6 typical)
- 12-hour shifts for duration of storm event if applicable



Snow Policy - Parks



First Priorities – Parking lots of City-owned facilities, City-owned sidewalks, Heritage Square, downtown alleys, FUTS that are concrete or asphalt

Second Priorities – Entrances to FUTS, parking lots to park locations, walkways within City parks, Courtesy Berm program



Snow Policy - Streets

First Priorities – Always open and passable

Main roadways, hills, downtown FUSD and NAIPTA routes

Second Priorities – Residential areas with accumulation greater than 3"-4"*

Once first priorities are manageable, residential plowing begins and policy benchmarks are met and often exceeded



Best Practices and Operations

Plowing procedures

Plow it right the first time, from the center working out, multiple passes required for all road sections

Snow placement

Adjacent to the curb and as wide as possible without compromising the sidewalk

Ice traction control

Ice cinders distributed and used extensively, effective but require multiple applications. Used throughout the duration of the storm and days following



Best Practices and Operations

Sidewalks

City owned sidewalks cleared by Parks Section using skid steer equipment and shovel crews. Sidewalks adjacent to private property maintained by property owner.

FUTS (concrete or asphalt) and Alleys

Plowed by city Parks Section and maintained with support of Streets

Sweeping and clean up

Streets sweeping crews address and provide service year-round, winter emphasis is on bike lanes and intersections. Increased use of ice cinders or multiple ice condition days adds significant clean-up



Urban Snow Operations Challenges

- Winter weather event and road conditions
- Traffic congestion and travel difficulty
- Attention to different modes; vehicle, bike, ped and transit
- Density and compact land use, topography
- CDL operator shortage and experienced operators

Time is the most important element in providing efficient and safe snow operations.



Future of Snow Operations

Alternative equipment

Additional equipment

Staffing levels and training

Time and service level expectations

Chemical treatments/de-icers

Routing and tablet technology

Real time GPS navigation and reporting



Questions?

