Winter Maintenance In The City of Ann Arbor

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Public Works Quick Facts

Service Functions

Water Distribution
Sanitary Collection
Stormwater
Solid Waste
Street Maintenance
Forestry
Park & Public Space Maintenance
Communications Systems

117 Full Time Employees

Public Works Technicians (97)
Supervisors (9)
GIS Coordinator (1)
Engineer (1)
Administrative Support (3)
Office Manager (1)
Financial Analyst (1)
Assistant Manager (2)
Unit Manager (1)

Quick Facts

- 100 miles of major roads
- 197 miles local roads
- 51 miles paved public path (park and non-park)
- Crosswalk Islands
- Gateway Treatments
- Salt dome (1)

Winter Maintenance Goal

- Provide passable roadway. clear pedestrian paths in ROW
- Free from drifts, snow ridges, and as much ice and snow pack as is practical and can be traveled safely at reasonable speeds.

Goal is not bare pavement

Winter Pavement Conditions

Bare Pavement

May be wet. Accurate and precise plowing and chemical use may be needed to achieve this condition and maintain normal travel speeds.

Bare Wheel Paths

Some slush may remain. Plowing and chemical applications have been made. The roadway is open to near-normal travel.

Plowed and Treated

Wheel paths may or may not be visible, some snowpack remaining, plowing and chemical use performed.

Plowed to Snowpack

Maintenance is being performed, but snowpack remains across the roadway.

Winter Response Fleet

- 10- single axle spreader 5 yd. dump trucks
- 3- tandem10 yd. dump trucks
- 34 additional vehicles to supplement in large events
- Specialized equipment for pedestrian paths

Winter Maintenance Methods

- Plows
- Salt (granular)
- Calcium Chloride
- Sand/Salt Mixture

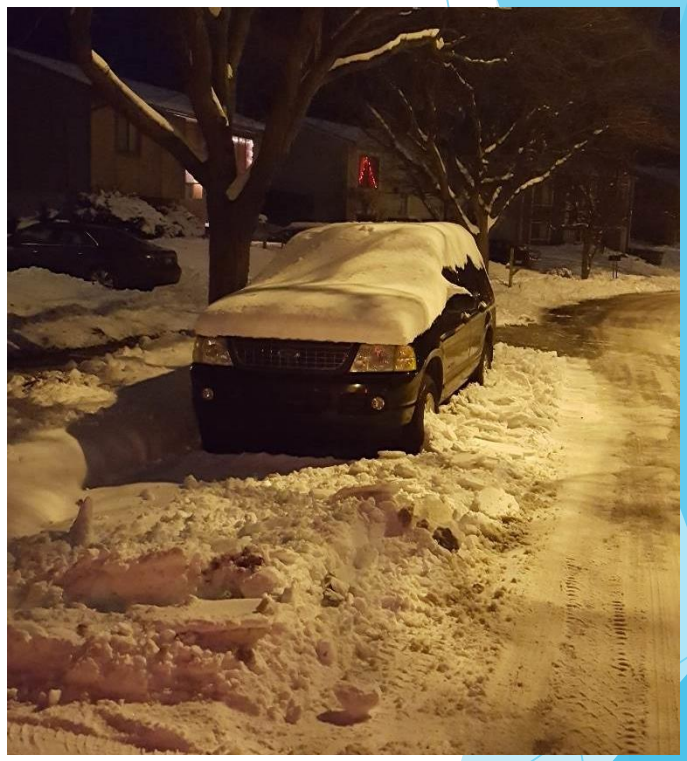
Winter Weather
Treatment Thresholds and Priority

- Less than four inch snowfall accumulation
  1. Treat major roads
  2. Treat known trouble spots on local roads as needed
  3. Treat park paths, non-motorized paths and pedestrian islands
- More than four inch snowfall accumulation
  - Increased staffing for plowing streets
  - Divert some staff from park snow response
  1. Treat major roads
  2. Plow local roads
     1. Prioritize by Solid Waste Collection Day

Routes

- 1 – Major Routes (8)
  - Highest volume road travel lanes
  - New! School Route
- 2 – Local Routes (22)
  - Next lower volume roads, turn lanes, median lane
- Multiple Non Motorized Routes

What we don't do: Bus Stops, Cross walk approaches, exit ramps, freeways



Non-motorized

- Multiple Routes and Methods
  - ROW walks, and paths
    - De-Icing is primarily a sand/salt combination, or just sand
  - Longer Segments of Path
    - De-Icing is primarily Salt
  - Bridge decks and longer segments of path/walk that receive snow from Streets Plowing activities
    - De-Icing is primarily salt

Non-motorized

- Pedestrian Island Routes (2)
  - Shovel or small snow throwers
  - De-Icing is primarily Calcium Chloride or Magnesium Chloride
- 2 Hand Routes:
  - Bridge steps, tight spaces
    - Shovel or small snow throwers
    - De-Icing is primarily Calcium Chloride or Magnesium Chloride
- Facility Lots and Drives
  - De-Icing is primarily Salt

Challenges and Initiatives

Challenges:

- Student Sections – On Street Parking used as car storage
- Narrow Streets, One Way Streets
- Snow Emergency

Initiatives

- Pilot Parking Restrictions
- Brine System
- Temperature Pucks

Budget

- Major Streets: $737,000
- Local Streets: $329,000
- Metro Fund:$130,000
- Parks (General Fund) $295,000

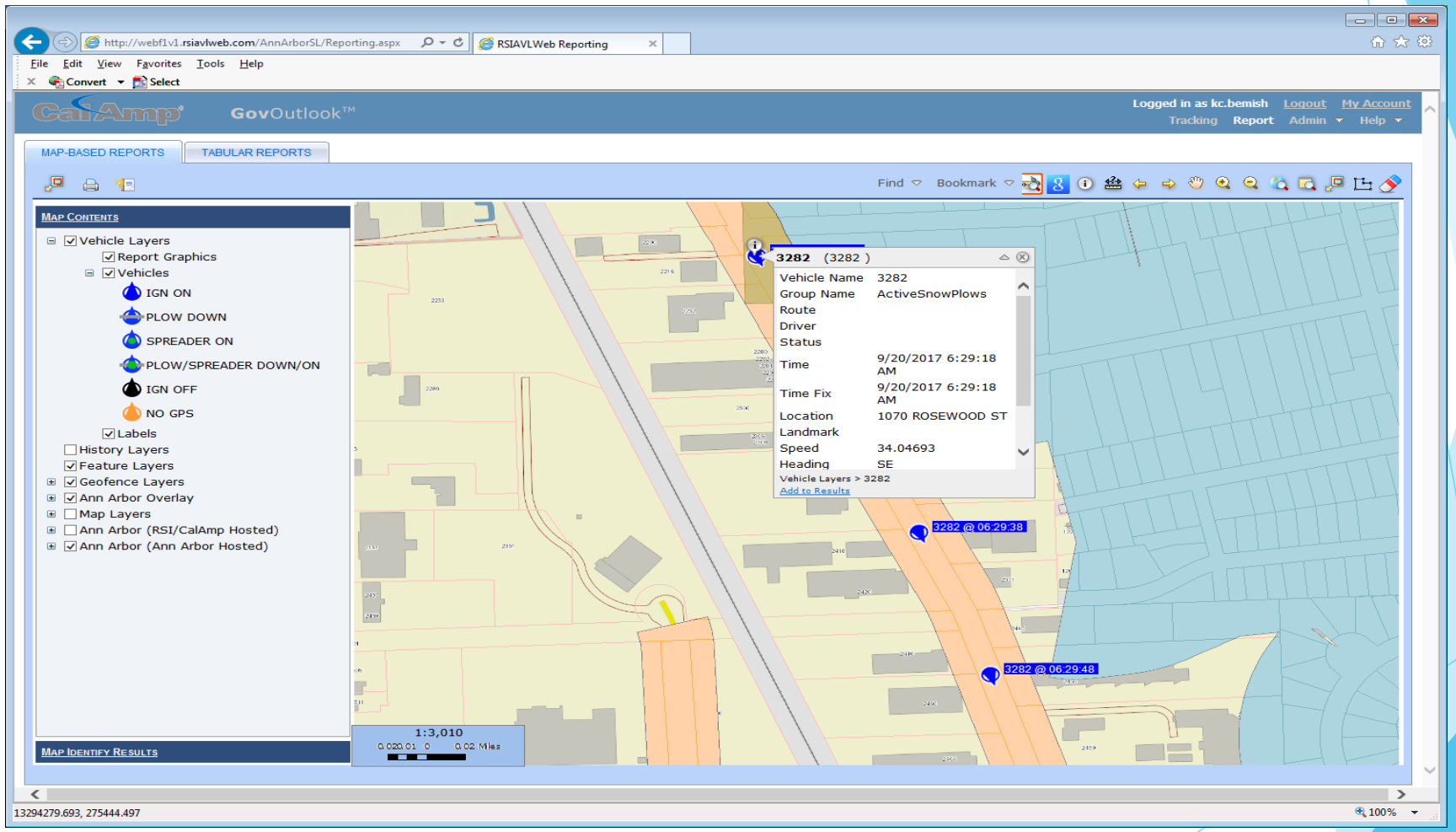
Challenges: Non-motorized, Alleys

Initiatives: Brine System

Resources and Tools

- Free Sand/Salt mix
- Green Lights
- A2Fix It
- Vehicle Tracking

AVL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Find Bookmark
MAP CONTENTS
Vehicle Layers
Report Graphics
Vehicles
IGN ON
PLOW DOWN
SPREADER ON
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IGN OFF
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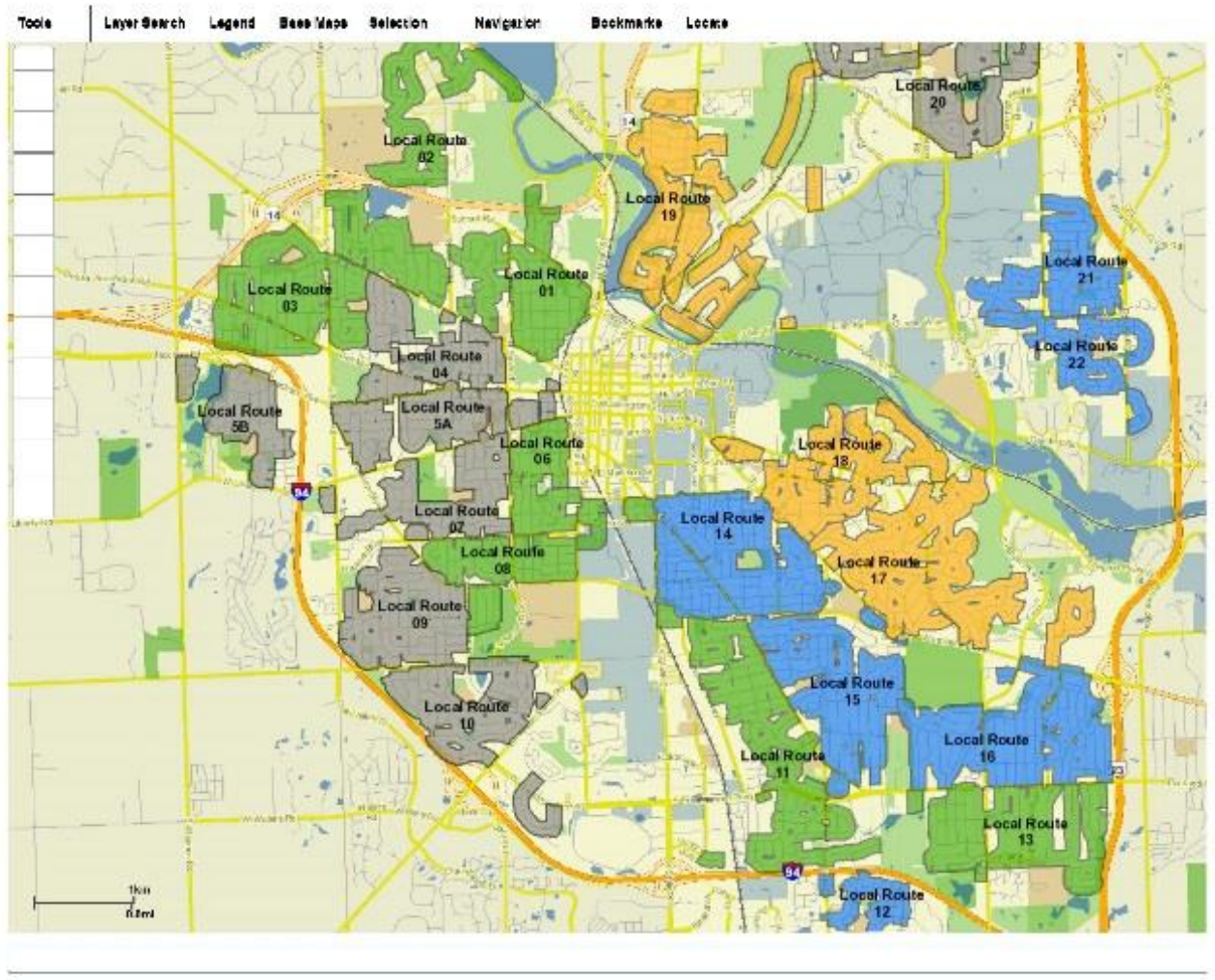
Labels
History Layers
Feature Layers
Geofence Layers
Ann Arbor Overlay
Map Layers
Ann Arbor (RSI/CalAmp Hosted)
Ann Arbor (Ann Arbor Hosted)
MAP IDENTIFY RESULTS
3282 (3282)
Vehicle Name 3282
Group Name ActiveSnowPlows
Route
Driver
Status
Time 9/20/2017 6:29:18 AM
Time Fix 9/20/2017 6:29:18 AM
Location 1070 ROSEWOOD ST
Landmark
Speed 34.04693
Heading SE
Vehicle Layers > 3282
Add to Results
3282 @ 06:29:38
3282 @ 06:29:48
1:3,010
0 0.02 0.01 0 0.02 Miles
13294279.693, 275444.497
100%

Coming Soon!

Cityworks http://cityworks/a2ams/FieldMap



Questions