

Winter Operations

Differences Between Rural & Urban Areas



WINTER IS COMING, DO YOU LOVE IT?

Some People Know How to embrace Winter!



Differences Between Rural & Urban Areas



Differences Between Rural & Urban Areas

- How do we define each of them?
- Rural area – any area that is not part of an urban area
- Urban area – any contiguous area of buildings, roads, and other structures within which structures are separated by less than 600 feet. Typically an urban area must have a population of at least 50,000.
- Of course, any smart arse would say: *Urban area – any area that is not part of a rural area, but that is probably not too helpful!*

Differences Between Rural & Urban Areas

- Does the public see it the same way?
- Why do people choose to live in each?
- What are the expectations vs reality?
- You can't change them so how do you deal with them?

Some Differences Between Rural & Urban Areas

Urban problems

- Traffic
- Traffic jams
- Multiple lanes
- Complicated intersections
- Cul de Sacs
- Pedestrian issues
- Bike path issues
- Obstacles (utilities etc.)
- Hauling snow

Rural problems

- Blowing snow
- Limited traffic
- Unreasonable expectations
- Long and isolated routes
- Long cycle times
- Appropriate levels of service and appropriate efforts assigned to different routes
- Storms can last for days

PROS AND CONS OF URBAN AREAS

PROS

- Traffic – it can work for you. It can add in your chemicals working
- High traffic volumes may mean lower speeds and may lead to fewer accidents

CONS

- Traffic congestion – generally high volume roads require a higher level of service.
- You may see fewer accidents but it only takes one to really mess this up.
- It may not be just cars sitting in traffic, you could be stuck too.

Storm Congestion – Urban



Rural



Handlings Urban Cons

- Traffic congestion – time any pre-treatments around the rush hours
- Ensure you have great communication with the traffic management folk
- Have a rapid response incident management team
- If stuck in traffic, what is your escape path?
- Good communication with the public (like the Iowa DOT Track-a-plow) is critical
- High tech idea – adjust your traffic light timing to take into account winter weather

Level Of Service



WHAT LEVEL OF SERVICE DO YOU PROVIDE, AND WHEN?



Environmental Issues

Urban

- Run off likely to storm sewer
- But, chlorides not removed at treatment plant
- Brought together, but not always a good thing!

Rural

- Run off into the ditches!
- From there, maybe to streams, maybe to groundwater
- Not easy to track but that does not mean it is not there...

Service Expectations – Rural “Urbanites”

- No dust
- No potholes/rutting
- No drainage problems
- High service levels
- Enjoy all aspects of “country living”



Expectations - Typical Rural Folk

- Patient
- Abundance of Common Sense
- Respectful
- Realistic
- A little “red neck” at times



Storm Challenge Urban

- Is this “thing” about over – “I have things to do”
- Schools out – I need to get my kids to the mall
- I have 1.3” of snow on my road – ridiculous
- Why aren’t the pavements all bare?
- What – you got snow on my driveway – bastards!

Spoiled Brat



Storm Challenges Rural “Urbanites”

- Some are really “out there”
- Want equal service to urban dwellers
- Want to pretend they are “cowboys/ranchers”
- Road needs open – opera tonight!

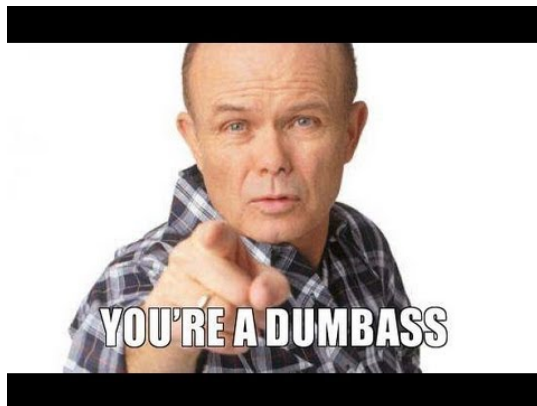


Storm Challenges Rural Folk

- Let's relax and have a party
- Better load up on milk and bread
- "Did the plow come by today"?
- Lets go snowmobiling
- Schools out this week – let's clean the barn!



Multi-Modal Crowd



Severe Drifting Urban



WHAT CAN YOU DO?

Snow fence is one way to help control blowing and drifting snow in rural areas.



Rural





BENCHING WING



PATROL WING

Wing Plow



Not just for Rural areas

Urban Plowing



Weather Technology



Utilities/GIS Technology



Urban “Nightmare”



Specialized Equipment



Extraordinary Conditions - Urban



Future Storage - Urban



Downtown Issues



Plowing Issues



Rural Environment





Storage Rural



Plow It Off – Re-fill



DEPARTMENT OF PUBLIC WORKS

SNOW AND ICE CONTROL MANUAL



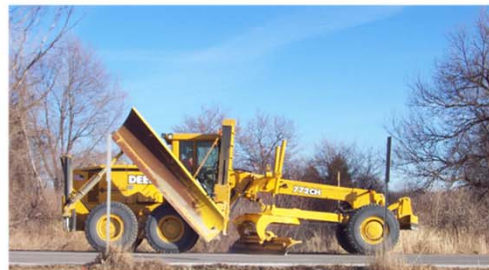
Special Operational Procedures



DEPARTMENT OF PUBLIC WORKS

UNIMPROVED STREET MAINTENANCE

PROCEDURES
&
INSTRUCTIONS



JULY 2

Wilf Nixon & R. Mark DeVries

Complainants Cul-de-sac



W.D.M. residents pan snow, ice removal efforts (*DM Register Headline – 2014*)

Hodne added that concerns last weekend, after a dusting of snowfall, arose because **residential** streets were not plowed at all, per a long-standing city policy.

“If someone doesn’t have all-wheel drive or four-wheel drive, they aren’t going to get out of this neighborhood very easily,” he (**resident**) said. “It does concern me that residential streets seem to be a second thought.”

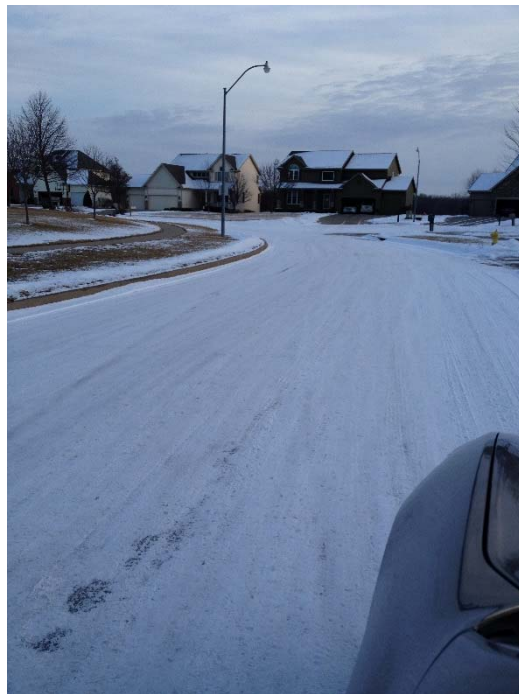


“Based on the number of complaints I’ve had, we don’t have a problem in the world,” Messerschmidt (***WDM Councilman***)said.

“The biggest thing is that elected officials need to read the snow and ice manual,” Trevillyan (***West Des Moines Councilman/WaterWorks employee***)said.

Messerschmidt (***City Councilman***) said the ***issue highlights a bigger concern of his regarding how officials field complaints***. He said complaints should be streamlined, and as specific as possible, to assure all City Council members and relevant department heads are on the same page and able to address recurring issues.

Streets after storm



Customer “Feedback”



Special Considerations



- Cemeteries in the middle of a road
- Leapfrog development
- Strip clubs
- Public Safety “morons”



Minnesota Hog Crossing



Grades/Drifting/Refreeze



Drifting Snow



Blowing/Visibility Concerns



Photo courtesy of Jim Moreland

U.S. 30 east of Glidden



Pottawattamie County - March 2007

"Where county trucks go to die . . ."

Right after the storm



Partially dug out



Bad Day - Alaska



Bad Day - Illinois



THANK YOU

QUESTIONS?