



GOODHUE COUNTY MINNESOTA

TO EFFECTIVELY PROMOTE THE SAFETY, HEALTH, AND WELL-BEING OF OUR RESIDENTS

COMMITTEE OF THE WHOLE AGENDA
COUNTY BOARD ROOM
GOVERNMENT CENTER
RED WING, MN

APRIL 2, 2019
3:30 A.M.

1. Inclement Weather Discussion.

Documents:

[Inclement Weather Agenda Report.pdf](#)
[Inclement Weather Presentation.pdf](#)

2. 2019 Assessment Summary

Documents:

[2019 Assessment Summ of Changes Comm of the Whole 2.pdf](#)

GOODHUE COUNTY DEPARTMENT OF PUBLIC WORKS



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HIGHWAYS ♦ PARKS ♦ SOLID WASTE

TO: Honorable County Commissioners
Scott Arneson, County Administrator

FROM: Greg Isakson, Public Works Director

RE: 02 Apr 19 Committee of the Whole Meeting
Inclement Weather Discussion

Date: 28 Mar 19

Staff from Public Works, Sheriff and Administration Departments will give a joint presentation on work performed, actions taken, results achieved, and lessons learned during the County's response to this winter's blizzards.

2019 INCLEMENT WEATHER

02 April 19 C.O.W.



SUMMARY OF DISCUSSION

- ▶ I. Public Works
 - A. Snow & Ice Control Overview
 - B. GCPW Shops
 - C. Staff
 - D. Equipment
 - E. Plow Routes
 - F. Hours of Operation
 - G. Snow Policy
- ▶ 2. Sheriff Department - Blizzard
- ▶ 3. Administration
 - Communication
- ▶ 4. Level of Service: Discussion Topic w/Board



A. Highway Snow and Ice Control Facts

400 Road Miles / 800 Lane Miles / 68 Miles of Gravel

Route Miles: Range from 11 to 41 miles in length

Average Time: 3.5 hrs to make one round

Variables:

Amount of snow

Type of snow (light and fluffy vs. wet and heavy)

Temperature – both air and road surface

Wind speed

Misc Facts:

All trucks set up w/pre-wet tanks

Pre-treat roads

~2,650 tons salt annually (5.3 million pounds)

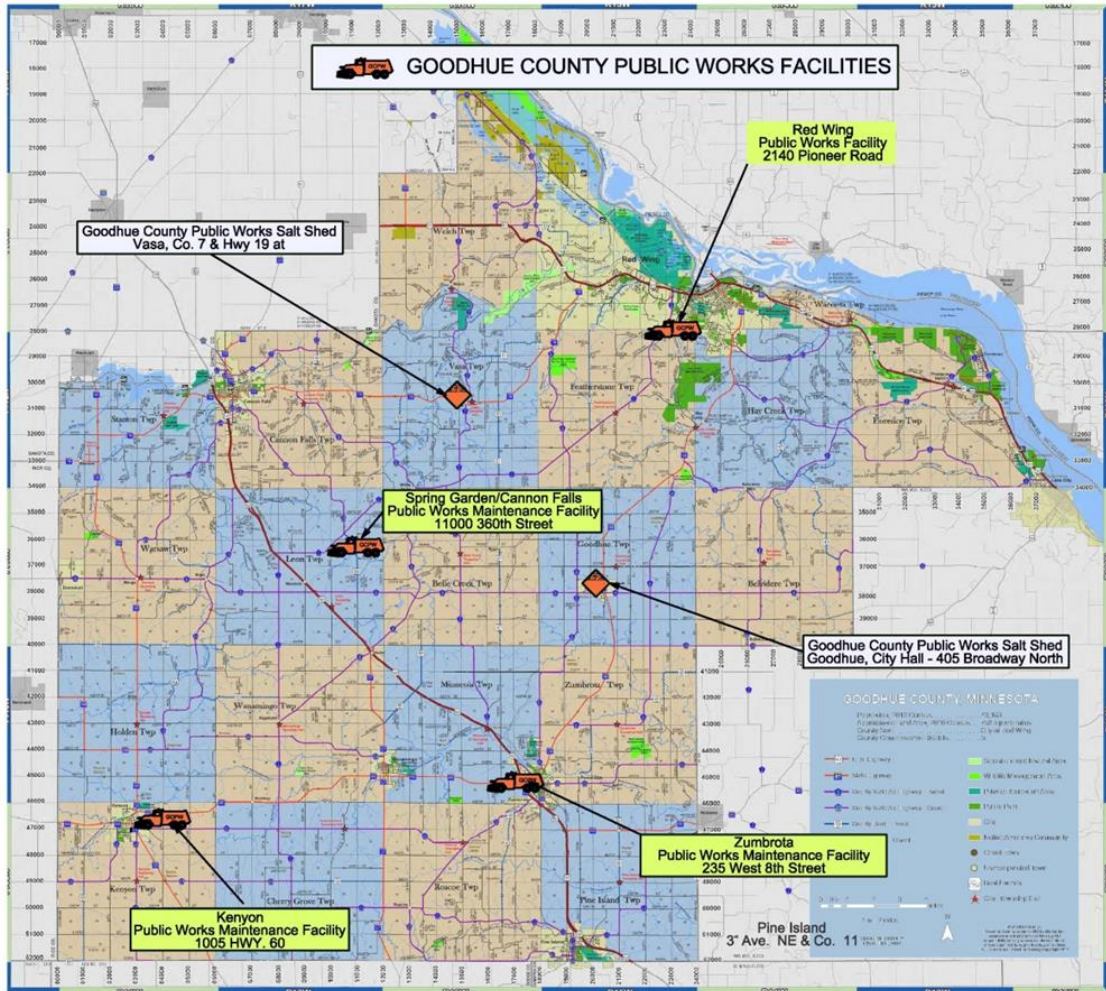
~3,000 tons sand annually (6.0 million pounds)



B-D. Equipment & Operators Per Shop

Cannon Falls

1 Loader
4 Tandems
4 Hwy Maint.



Kenyon

1 Loader
1 Grader
2 Tandems
2 Hwy Maint.
* Rd Foreman

Red Wing

1 Loader
1 Grader
5 Tandems
6 Hwy Maint.

2 Snow Blowers
2 Dozers

Zumbrota

1 Loader
1 Grader
3 Tandems
4 Hwy Maint.

Shops (4)

Red Wing – Pioneer Road

Kenyon – South of TH 60 on east side of Kenyon

Cannon Falls – South of CSAH 1 by Spring Garden

Zumbrota – East of TH 52 on 8th St



Heavy Equipment



Pre-treating the roads



Tandem Snowplow Truck Plowing



Winging – Pre-wetting - Sanding



View from the driver's seat!

Snow removal is an art, not a science.



Snow Cloud Behind Plow Truck



Equipment & Maintenance

- ▶ **Mechanical / Electrical / Hydraulic Issues w/ Tandems**
 - ▶ Tandem's sent to repair shops in 2019.

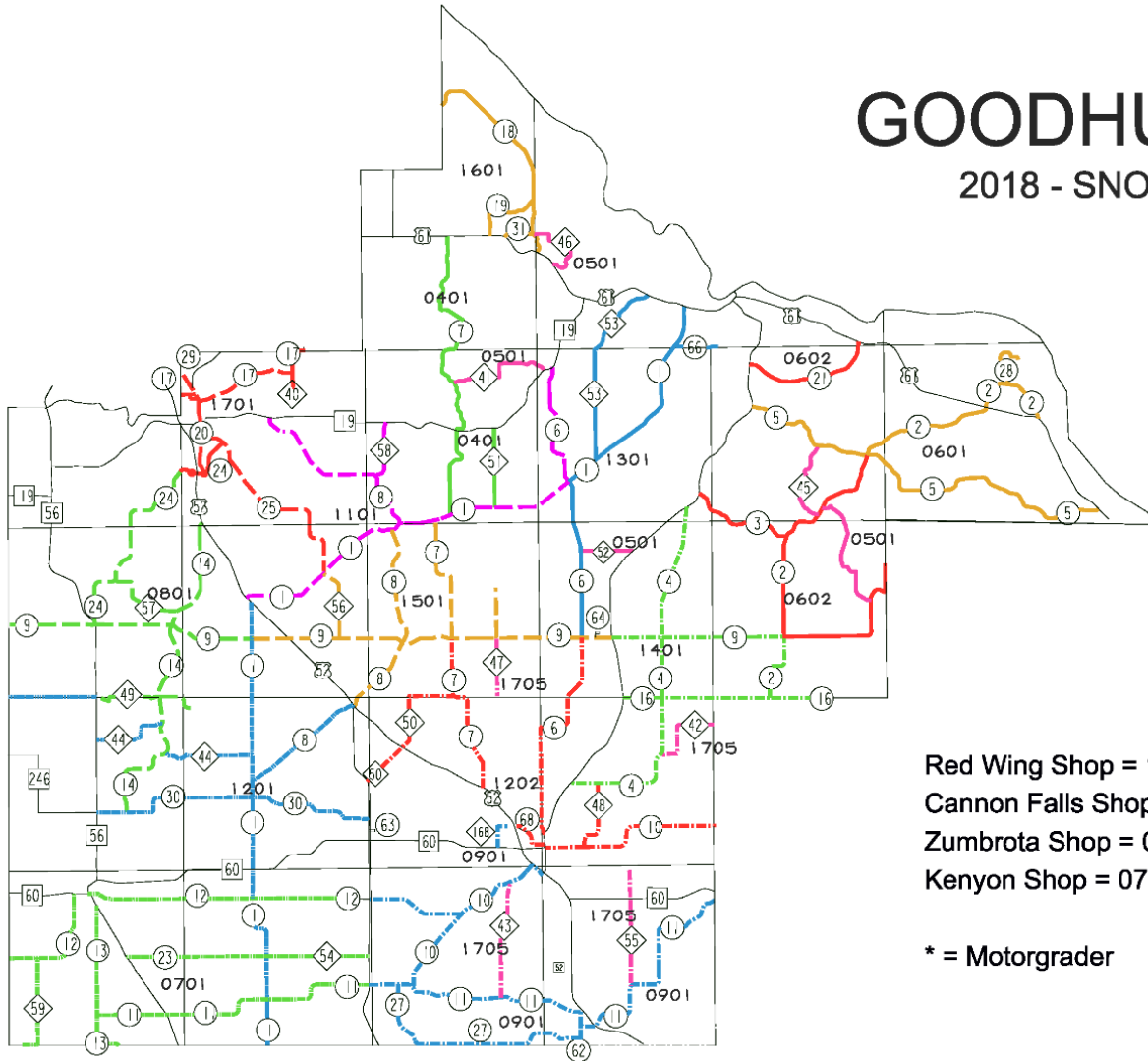
UNIT	ISSUE	DATE
0901	Transmission	02-04-2019
1401	Harness for Motor	02-07-2019
1601	Harness for Emissions	02-19-2019
1501	Ghost Codes	03-07-2019
1201	Main Wiring Harness * Unavailable until May 10, 2019	03-07-2019
1701	Truck shuts off randomly * Undiagnosed currently: 3-27-2019	03-19-2019

- ▶ **Repair/Parts Expenses: January – March**
 - \$30,200 Budget: \$80,000
- ▶ **Outsourced Repair / Towing Service Expenses: January - March**
 - \$7,000 Budget: \$20,000

▶ * Expenses are accurate as of document preparation. Large bills for March are expected to arrive.

E. Plow Routes

GOODHUE COUNTY 2018 - SNOWPLOW ROUTES



Red Wing		
—	0401	14.6
—	1601	11.1
—	1301	21.3
—	0601	24.5
—	0602	19.8
—	0501	11.3
Cannon Falls		
- - -	1701	35.2
- - -	1501	25.7
- - -	1101	29.8
- - -	0801	17.0
Zumbrota		
- - -	0901	41.2
- - -	1202	28.1
- - -	1401	24.5
- - -	0205	10.8
Kenyon		
- - -	0701	41.1
- - -	1201	39.0

Red Wing Shop = 1601, 0401, 0601, 0602, 1301, 0501*

Cannon Falls Shop = 1701, 0801, 1101, 1501

Zumbrota Shop = 0901, 1202, 1401, 0205*

Kenyon Shop = 0701, 1201, 0902*

* = Motorgrader

F. Hours of Operation

▶ Average Snow Event Requiring Plowing

2:30 A.M.	Start calling staff
4:00 A.M.	Staff reports to their shops
4:15 A.M.	Begin plowing efforts

- ❑ The average round for a route takes approximately 3 ½ hours.
- ❑ Plowing efforts continue until the roads are clear / conditions worsen / or somewhere between 4:00 P.M. and 6:00 P.M.
- ❑ A few plows typically remain to ensure higher priority routes stay clear.
- ❑ Nighttime plowing efforts consist of responding to emergency calls from the Sheriff's Department.

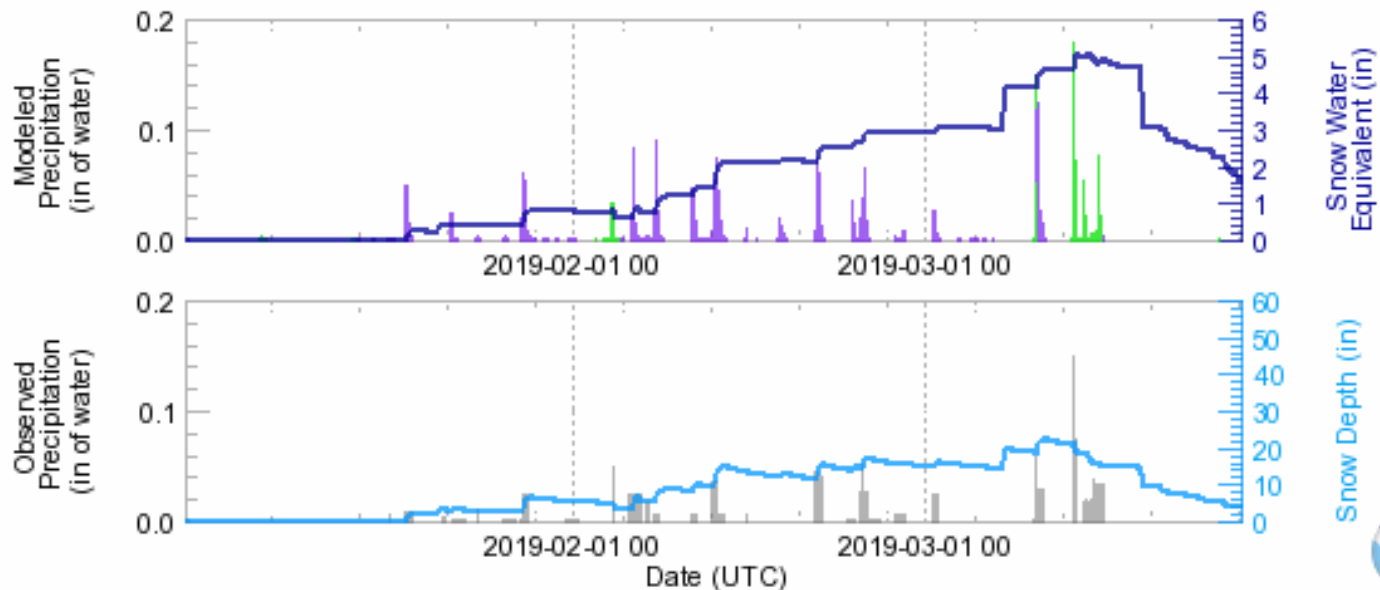


2019 Snow Events

Precipitation, Snow Water Equivalent, and Snow Depth

Modeled and Observed

Station: RDWM5 - RED WING DAM 3
Latitude: 44.6103 N
Longitude: 92.6101 W
Elevation: 663 Feet
Start Date: 2019-01-01 06 UTC
Stop Date: 2019-03-26 06 UTC
Forest Density: 36%
Land Use: Cool Forest and Field



2019 Snow Events, cont.

▶ 2019 Snow Events by Month

- ▶ January 3 snow storms
- ▶ February 10 snow storms
- ▶ March 2 snow storms

▶ 2019 Material / Labor Usage to Date

- ▶ Sand & Salt Mixture: 5,600 Tons \$297,250 Budget: \$268,000
- ▶ Diesel: 32,000 Gals \$ 77,650 Budget: \$140,000
- ▶ Labor (OT): 2,270 Hrs \$ 42,380 Budget: \$ 25,000



Plowing Snow



Plowing Snow



Plowing Snow



SNOWMAGEDDON 2019



G. Highway Snow and Ice Control Policy

General Goal of the Department



Keep the county road system passable during the most heavily traveled periods of the day.



Roads are prioritized by traffic volume and logical routing.



The three priorities are:

- Make the road passable.
- Widen the lanes and apply abrasive/chemical mixture.
- Clean up.



911

Emergency Calls: Snow plow crews will **not** be dispatched at night on most roads except for true emergency calls, such as assisting fire departments, ambulance crews, or searching for known stranded motorists. Icing bridges or snow drifting on roads **are** an expected aspect of winter travel and generally are not adequate justification to dispatch the snow plow crews. Note that in **no** case is 24 hour a day coverage time provided, due to lower traffic volumes, limited resources available and operator safety concerns.



These are **GENERAL** guidelines used by the Goodhue County Public Works department. Each decision to mobilize, to keep the snow plow crews working, and to apply chemicals is a judgment call based on the particular weather conditions, past experience, the availability of resources at that particular time and therefore may not adhere strictly to this general policy.

2. Sheriff's Department – Blizzard



Sheriff Kelly



February 24, 2019 Blizzard

- ▶ As the storm progressed, the Sheriff's Office became overwhelmed with the number of vehicles that became stuck along the roads needing assistance
- ▶ No travel advisory was issued for most of SE MN including Goodhue County
- ▶ Community Shelters started opening up in the early afternoon in the following cities to aid motorists that became stranded: Pine Island, Zumbrota, Wanamingo and Kenyon



February 24, 2019 Blizzard

- ▶ In Mid-afternoon, Sheriff declared a State of Emergency
- ▶ Contacted the MN Duty Officer and requested assistance from the National Guard – specifically requesting the Small Unit Support Vehicle (SUSV). The closest one available was at Camp Ripley
- ▶ It took several hours for the SUSV to arrive.
- ▶ It was recommended that no one travel in Goodhue County until further notice
- ▶ In the meantime, vehicles with stranded motorists continued to place calls into the 9-1-1 Dispatch Center
- ▶ Snowmobile Clubs volunteered to send their Snow Groomers out to help rescue the motorists



February 24, 2019 Blizzard

- ▶ Many County Highways and State Highways were shut down
- ▶ Snow Plows were pulled from the roads
- ▶ Tow truck companies eventually had to discontinue taking calls for their own safety
- ▶ The SUSV arrived in Goodhue County at about 10:30-11:00
- ▶ The National Guard in Red Wing opened a shelter for motorists and for those that the SUSV crew might rescue.
- ▶ The SUSV stopped at many vehicles that were parked along the roads to make sure that there were not people in them
- ▶ Some vehicles had people in them but were waiting to be picked up



February 24, 2019 Blizzard

- ▶ SUSV crew rescued a man that had been in his vehicle for approximately 9 hours on a County Highway stuck between two very large snow drifts
- ▶ Shortly thereafter, the SUSV got stuck in one of the huge drifts that the vehicle had been between
- ▶ Goodhue County Public Works managed to help the SUSV get back on the road
- ▶ Dispatch received 692 calls on February 24, 2019



FYI – SUSV INFORMATION



FY16 WSR VEHICLE INFORMATION

CAPACITY:

2 Crew +12 Passengers=14

RANGE:

270 Miles

TOP SPEED:

40 MPH

LOCATIONS: (13)

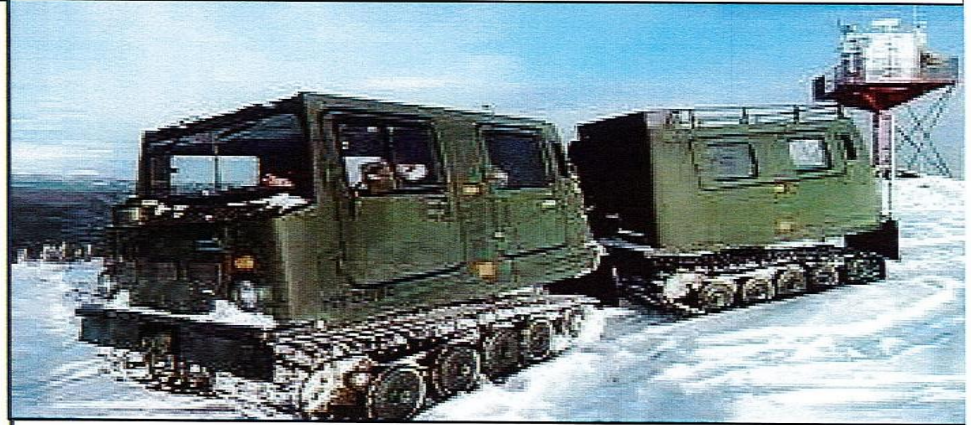
1/34 ABCT

- Cloquet (1)
- Alexandria (1)
- Mankato (1)
- Owatonna (1)
- Albert Lea (1)
- Moorhead (1)
- Fergus Falls (1)
- Thief River Falls (1)
- Grand Rapids (1)
- Pipestone (1)
- Luverne (1)
- Jackson (1)
- Fairmont (1)

84th Troop Command (2)

- Olivia (1)
- Ortonville (1)

Camp Ripley Training Center / CMA-N (2)



SMALL UNIT SUPPORT VEHICLE (SUSV)

Lessons Learned

- ▶ We worked together organizing a Severe Winter Weather Emergency Plan
- ▶ Procedures for Declaring a State of Emergency enabling the Sheriff to request the National Guard
- ▶ Procedures for better communication between Public Works regarding road closures for Administration, 9-1-1 Dispatch, Patrol and all county employees and the public
- ▶ Work as a team to get the proper message out
- ▶ Social Media will be used to help get the message out regarding road closures, State of Emergency and other important information
- ▶ Contacting communities prior to the onset of a major storm to find out if they will be establishing shelters



Lessons Learned

- ▶ **Fully staff Dispatch at the onset of a severe winter storm**
- ▶ **Added possible resources such as Snow Groomers that might be able to be used to rescue folks from the roads**
- ▶ **Review procedures prior to winter weather season, sharing with partners prior to the onset of a major winter storm.**
- ▶ **Consider using IPAWS for getting the message out about no travel advisories.**



Any Questions?



3. Administration



Communication

- Goodhue County Website
 - Alert Center
 - Notify Me
- Facebook
- COOP Plan to be updated



<https://www.co.goodhue.mn.us/>



4. Level of Service



Level of Service

- ▶ **Board of Commissioners Discussion Topics**
 - ▶ 1. Is the level of service provided by Public Works and the Sheriff's Department meeting, exceeding, or maintaining the Board's expectations?
 - ▶ 2. Are the Departments adequately staffed to meet the expected level of service?
 - ▶ 3. Do the Departments have an appropriate amount of equipment to provide service as expected?
 - ▶ 4. Are there questions, comments, or concerns from the Board?
 - ▶ 5. Other



2019 Assessment Summary of Changes – LBAE

Agricultural Land

Reduced \$400/acre Tillable CER Base This year has shown a decrease in tillable CER land throughout the County of approximately \$400 per acre. While this is consistent throughout the County, keep in mind that your soil CER rating may not be the same for every parcel you may have or that of your neighbors, so the decreases in land may not be the same. Overall % of reduction is 4.598%

ON Water/Off Water

On Water and Off Water parcels were now separated to determine ratios as sales are different for each.

Woods Changes

1RBS increased from \$2,400 to \$2,800
Low Woods increased from \$2,400 to \$2,800
Medium Woods increased from \$2,800 to \$3,200
Overall increase of \$400/acre per each type

Land to Building Ratios

Analysis was completed to determine Land to Building Ratios based on current sales. Residential land rates in the cities of Cannon Falls, Dennison, Goodhue, Kenyon, Wanamingo and Zumbrota were increased to reflect Land to Building Ratios of 20% +/-.

Red Wing Land

Changed \$500/ff to \$550/ff and \$600/ff to \$625/ff

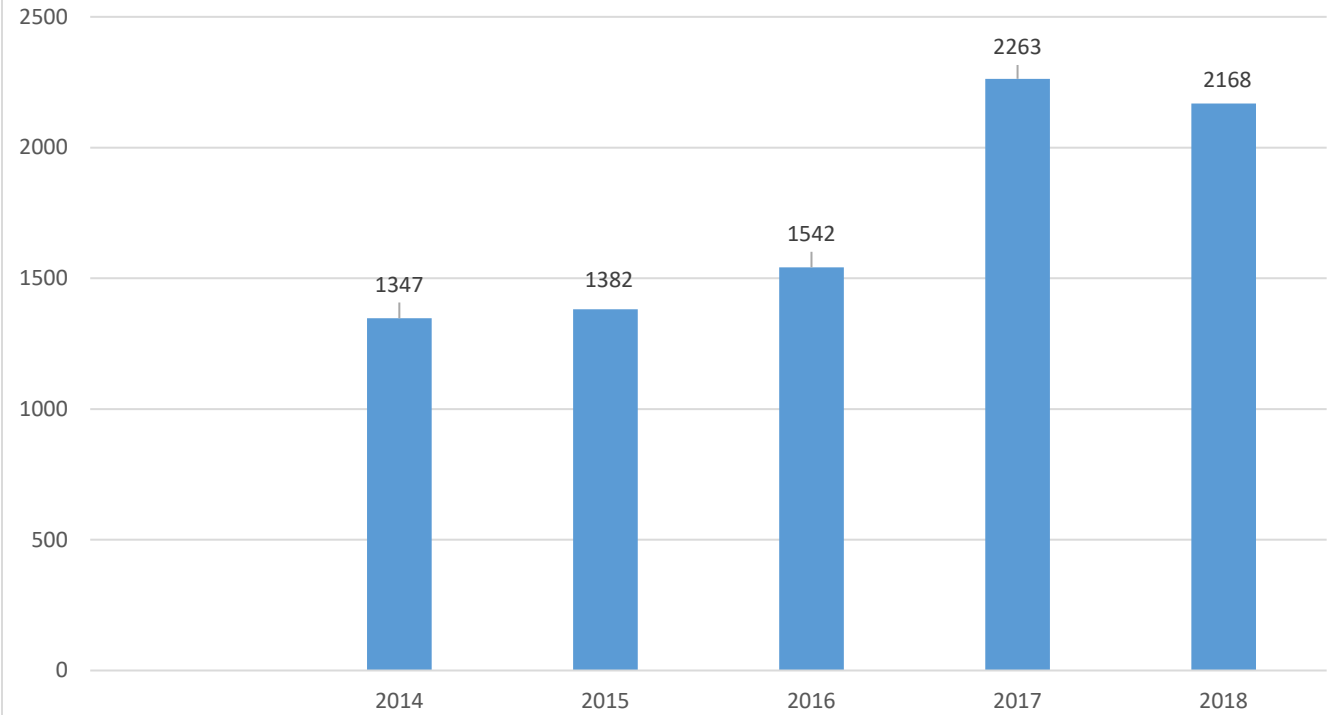
Quintile

The total number of parcels reviewed by the appraisers to meet the quintile requirements by the State were 5,625 parcels.

The quintile area for the 2019 Assessment included the following Townships and Cities:

Goodhue Twp, Pine Island Twp, Zumbrota Twp, Goodhue City, Pine Island City, and Zumbrota City. Red Wing City Commercial as stated above.

Total Permits Last 5 Yrs



Total Estimated Market Value By Type

