



MONDAY, OCTOBER 16, 2023
BOARD OF TRUSTEES REGULAR MEETING AGENDA
7:00 PM SOUTH ROOM

Electronic file format: Hover over agenda item to take you to the corresponding page.

	Resp. Party	Action	Attachment
1. MEETING OPENING			
a. Call to order	JM		
b. Pledge of Allegiance	JM		
c. Roll Call	CB		
2. PUBLIC COMMENT <i>(limit of 3 minutes per comment may be enforced)</i>			
3. CONSENT AGENDA	JM		
a. Correspondence (Receive & Place on File):			
i. Notice of Clinton County Public Hearing-ORV			1
ii. Acknowledgment of Donation by the Clark Family			2
iii. Economic Forecast and Fiscal Outlook 2024-2025			3
b. Routine Bills – Bill List Approval		Motion to approve all items on the consent agenda, minus items pulled from consent	4
c. Board Reports (Receive & Place on File):			
i. Planning Director September 2023			5
ii. Permitting Activities, September 2023			6
iii. Treasurer Memo, September 2023			7
iv. Investment Report, September 2023			8
v. Treasurer Financial Status Report, September 2023			9
vi. Township Manager, September 2023			10
d. Reports (Receive & Place on File):			
i. SCCMUA Director’s Report – September 2023			11
ii. Clinton County Sheriff Report – September 2023			12
iii. Clinton County Residential Recycling Options & Costs			13
iv. Clinton County Township Officers Association Minutes			14
4. AGENDA APPROVAL	JM	Motion	Agenda
5. APPROVAL OF MINUTES			
a. September 18, 2023, Regular Meeting	JM	Motion	15
b. September 18, 2023, Closed Session Meeting			16
c. October 2, 2023, Special Budget Work Session Meeting			17
6. APPROVAL OF BILLS			
a. Additional Bill List	JM	Motion	On Table
7. PUBLIC HEARING <i>(5 Minute limit on comments may be enforced)</i>			
a. None	N/A	N/A	N/A
8. PENDING BUSINESS	N/A	N/A	N/A

CLINTON COUNTY BOARD OF COMMISSIONERS

Chairperson

Robert Showers

Vice-Chairperson

Kenneth B. Mitchell

Members

Valerie Vail-Shirey

David W. Pohl

Bruce DeLong

John Andrews

Dwight Washington

**COURTHOUSE
100 E. STATE STREET
ST. JOHNS, MICHIGAN 48879-1571
989-224-5120**



Administrator/Controller

John F. Fuentes

Clerk of the Board

Debra A. Sutherland

NOTICE OF PUBLIC HEARING

Pursuant to MCL 324.81131(2)
Please take Notice that the
Clinton County Board of Commissioners
will hold a Public Hearing on:

Tuesday, October 31, 2023 at 9:00 a.m.

Clinton County Board of Commissioner's Room
100 E. State St., Ste. 2200
St. Johns, MI 48879

The purpose of this public hearing is to receive public input for the purpose of adopting an ordinance authorizing and regulating the operation of Off-Road Vehicles (ORVS) on roads in Clinton County.

This may also be viewed at www.clinton-county.org

Debra A. Sutherland
Clerk of the Board of Commissioners
(989)224-5140

**STATE OF MICHIGAN
COUNTY OF CLINTON
ORV ORDINANCE**

An ordinance authorizing and regulating the operation of Off-Road Vehicles (ORVs) on roads in Clinton County, providing penalties for the violation thereof, and for the distribution of public funds resulting from those penalties pursuant to 2008 PA 240, as amended, which is incorporated by reference in its entirety.

THE COUNTY OF CLINTON ORDAINS:

Section 1. Definitions. As used in this ordinance, the following definitions shall apply:

- a) “County” means the County of Clinton.
- b) “Direct supervision” means the direct visual observation of the operator with the unaided or normally corrected eye, where the observer is able to come to the immediate aid of the operator.
- c) “Driver’s license” means an operator’s or chauffeur’s license, or permit issued to an individual by the Secretary of State under Chapter III of the Michigan Vehicle Code, 1949 PA 300, as amended, MCL 257.301 to 257.329, for that individual to operate a vehicle, whether or not conditions are attached to the license or permit.
- d) “Maintained portion” means the roadway and any shoulder of a road.
- e) “Operate” means to ride in or on, and be in actual physical control of, the operation of an ORV.
- f) “Operator” means a person who operates or is in actual physical control of the operation of an ORV.
- g) “ORV” means a motor-driven off-road recreation vehicle capable of cross-country travel without benefit of a road or trail, on or immediately over land, snow, ice, marsh, swampland, or other natural terrain. ORV includes, but is not limited to, a multitrack or multi-wheel drive vehicle, an ATV, a motorcycle or related 2-wheel vehicle, a vehicle with 3 or more wheels, an amphibious machine, a ground effect air cushion vehicle, or other means of transportation. ORV does not include a snowmobile, a farm vehicle being used for farming, a vehicle used for military, fire, emergency, or law enforcement purposes, a vehicle owned by a utility company or an oil or gas company when performing maintenance on its facilities or on property over which it has an easement, a construction or logging vehicle used in the performance of its common function, or a registered aircraft.

- h) “Road” means a county primary road or county local road as described in Section 5 of 1951 PA 51, as amended, MCL 247.655.
- i) “Safety Certificate” means a certificate issued pursuant to 1994 PA 451, as amended, MCL 324.81130, or a comparable ORV safety certificate issued under the authority of another state or a province of Canada.

Section 2. Designated Roads.

- a) An ORV may be operated only on the far right on the maintained portion of a county road.
- b) An ORV may not be operated on the road surface, roadway, shoulder or right-of-way of any State or Federal highway, including but not limited to M-21, M-100, I-96, I69, Business US-27, & 127, or any other State or Federal highway in Clinton County.
- c) A person operating an ORV on a County Road may cross an excluded road as indicated in paragraph (b) of this section for the sole purpose of continuing travel on the County Road. The crossing of the excluded road shall only be performed if the operation can be done safely and only at a right angle. The operator shall bring the vehicle to a complete stop before proceeding across the excluded road and shall yield the right-of-way to oncoming traffic.
- d) A township board of a township in the County may adopt an ordinance to close any roads within the boundaries of the township to the operation of ORVs permitted by the County, pursuant to MCL 324.81131(4).
- e) The Board of County Road Commissioners may close no more than 30% of the total linear miles of county roads located within the county to the operation of ORV’s that would otherwise be authorized for ORV operation pursuant to this ordinance, or a township ordinance under MCL 324.81131(3), but only when the Road Commission determines closing is necessary to protect the environment or if the operation of ORVs pose a particular and demonstrable threat to public safety.
- f) An ORV may not be operated on any City or Village Road surface, roadway, shoulder, or right-of-way in Clinton County, unless allowed by City or Village ordinance.

Section 3. Operating Conditions. Except as set forth herein or otherwise provided by law, an ORV meeting all the following conditions may be operated on a county road in the County:

- a) At a speed of no more than 25 miles per hour, or a lower posted ORV speed limit.
- b) With the flow of traffic.
- c) In a manner which does not interfere with traffic on the road.

- d) Traveling single file, except when overtaking and passing another ORV.
- e) While displaying a securely attached white-lighted headlight and red-lighted taillight with brake light at all times.
- f) By a person not less than 12 years of age.
- g) An ORV shall not be operated pursuant to this ordinance during the period of 30 minutes before sunset to 30 minutes after sunrise or when visibility is substantially reduced due to weather conditions unless displaying a lighted headlight and lighted taillight.
- h) A child who is less than 16 years of age shall not operate a 3-wheeled ORV.
- i) The ORV shall be equipped with a braking system that may be operated by hand or foot, capable of producing deceleration at 14 feet per second on level ground at a speed of 20 miles per hour; a red brake light, brighter than the taillight, visible from behind the vehicle when the brake is activated, and a throttle so designed that when the pressure used to advance the throttle is removed, the engine speed will immediately and automatically return to idle.
- j) The ORV shall be equipped with at least one mirror securely mounted and positioned on the ORV in such a manner to be able to clearly view traffic approaching from behind.
- k) Each operator and passenger must wear a crash helmet and protective eyewear approved by the United States Department of Transportation unless the vehicle is equipped with a roof that meets or exceeds standards for a crash helmet and the operator and each passenger is wearing a properly adjusted and fastened seat belt.
- l) While the ORV is equipped with a spark arrester type United States Forest Service approved muffler in good working order and in constant operation.
- m) Pursuant to noise emission standards defined by law.
- n) ORVs must not be operated in a manner that will cause damage to the road surface or shoulder. In this regard, prohibited activity includes but is not limited to actions such as “fishtailing” and spinning of tires that disperses gravel and creates ruts and other damage.

Section 4. License: Safety Certificate. A person less than 18 years of age shall not operate an ORV on a road in the County unless the person is in possession of a valid driver’s license or unless the person is under the direct supervision of a parent or guardian and has in his or her possession an ORV Safety Certificate.

Section 5. Registered Motor Vehicle. Unless a person possesses a valid driver's license, a person shall not operate an ORV on a road in the County if the ORV is registered as a motor vehicle, and either is more than 65 inches wide or has three wheels.

Section 6. Evidence. In a court action in this state, if competent evidence demonstrates that a vehicle that is permitted to operate on a road, street, or highway pursuant to the Michigan Vehicle Code was in a collision on a roadway with an ORV that is not registered under the Code, the operator of the ORV shall be considered prima facie negligent.

Section 7. Penalties. Any person who violates this ordinance is guilty of a municipal civil infraction and shall pay a civil fine of not less than \$250.00 and not more than \$500.00. In addition, a court may order the person to pay full restitution for any damage to the environment, a road, or public or private property damaged as a result of the violation.

Section 8. ORV Fund. The County Treasurer shall deposit all fines and damages collected under this ordinance into a fund to be designated as the ORV Fund. The Clinton County Board of Commissioners shall appropriate revenue in the ORV Fund as follows:

- a) Fifty percent to the Clinton County Road Commission for repairing damage to roads and the environment that may have been caused by ORVs, and for posting signs indicating ORV speed limits, or indicating whether roads are open or closed to the operation of ORVs.
- b) Fifty percent to the Clinton County Sheriff for ORV enforcement and training.

Section 9. Master Map. The County shall maintain a master map of all roads under the jurisdiction of the Clinton County Road Commission upon which shall be indicated those roads and parts or sections thereof upon which the operation of ORV's is permitted and prohibited pursuant to this Ordinance. The County shall make such master map available for interested groups or organizations to make copies for distribution to the general public, but shall have no obligation to incur any expense associated with the making of such copies.

Section 10. Repeal Clause. All Ordinances or parts of Ordinances in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

Section 11. Savings Clause. This Ordinance shall in no manner affect pending litigation, either civil or criminal, founded or growing out of any Ordinance, Resolution, Order or parts thereof, hereby repealed, and this Ordinance shall in no manner affect any rights, claims, privileges, immunities or causes of action of the County, or other person, either criminal or civil, that may have already occurred, accrued or grown out of any Ordinance, Resolution, Order or policy, or any part thereof, hereby repealed.

Section 12. Validity and Severability. Should any portion of this Ordinance be found invalid for any reason, such a holding shall not be construed as affecting the validity of the remaining portions of this Ordinance.

Section 13. Effective Date. This Ordinance shall be effective immediately after publication of notice of its adoption.

Section 14. Immunity Clause. Subject to section 5 of 1964 PA 170, MCL 691.1405, this state, a board of county road commissioners, a county board of commissioners, and a local unit of government are immune from tort liability for injuries or damages sustained by any person arising in any way out of the operation or use, on the maintained portion or unmaintained portion of a highway, road, or street, of an ORV. The immunity provided by this subsection does not apply to actions of an employee of this state, an employee of a board of county road commissioners, an employee of a county board of commissioners, or an employee of a local unit of government that constitute gross negligence. As used in this subsection, "gross negligence" means conduct so reckless as to demonstrate a substantial lack of concern for whether an injury results.

This Ordinance was adopted by action of the Clinton County Board of Commissioners on

_____.



October 10, 2023

John Maahs
Supervisor

Clark Family
c/o Sara Mathews Clark
13450 S. Bauer Rd.
Eagle, MI 48822

Carolyn Brokob
Clerk

Sue Biergans
Treasurer

Dear Clark Family,

Chad Cooley
Trustee

It is with sincere appreciation we accept your recent donation of two large rocks from your Watertown Charter Township property. The rocks will be used in the Wacousta Cemetery as part of the newly constructed Columbarium (cremains repository) and Cremains Garden.

Todd Hufnagel
Trustee

The township would also like to extend our thanks to Jake Clark for meeting with me to scout out the boulders and then being willing to move them to the cemetery, especially at a busy time during harvest.

Holly Madill
Trustee

On behalf of the entire Board of Trustees and the Cemetery Board, please accept our gratitude for enhancing our community with your generosity.

Ronald Overton
Trustee

Sincerely,

Jennifer Tubbs
Manager

Andrea Polverento
Planning Director

Carolyn Brokob
Municipal Clerk

Welcome To The Lansing Economic Outlook

THE JAMES B. HENRY CENTER FOR EXECUTIVE DEVELOPMENT
3535 FOREST ROAD, LANSING



Dr. Steve Miller
MSU Extension for Economic Analysis



Dr. Eric Scorsone
MSU Extension Center for Local
Government Finance and Policy



Samantha Le
Associate, Retail Advisor
Martin Commercial Properties



Agricultural, Food, and
Resource Economics
MICHIGAN STATE UNIVERSITY

Lansing Economic Outlook: 2024

October 5, 2023
East Lansing, MI

Steven R. Miller

Director: Center for Economic Analysis



MSU Economic Forecast Model

- National
- State
- Core Based Statistical Areas (CBSA)
 - Lansing-East Lansing
 - Detroit-Warren-Dearborn



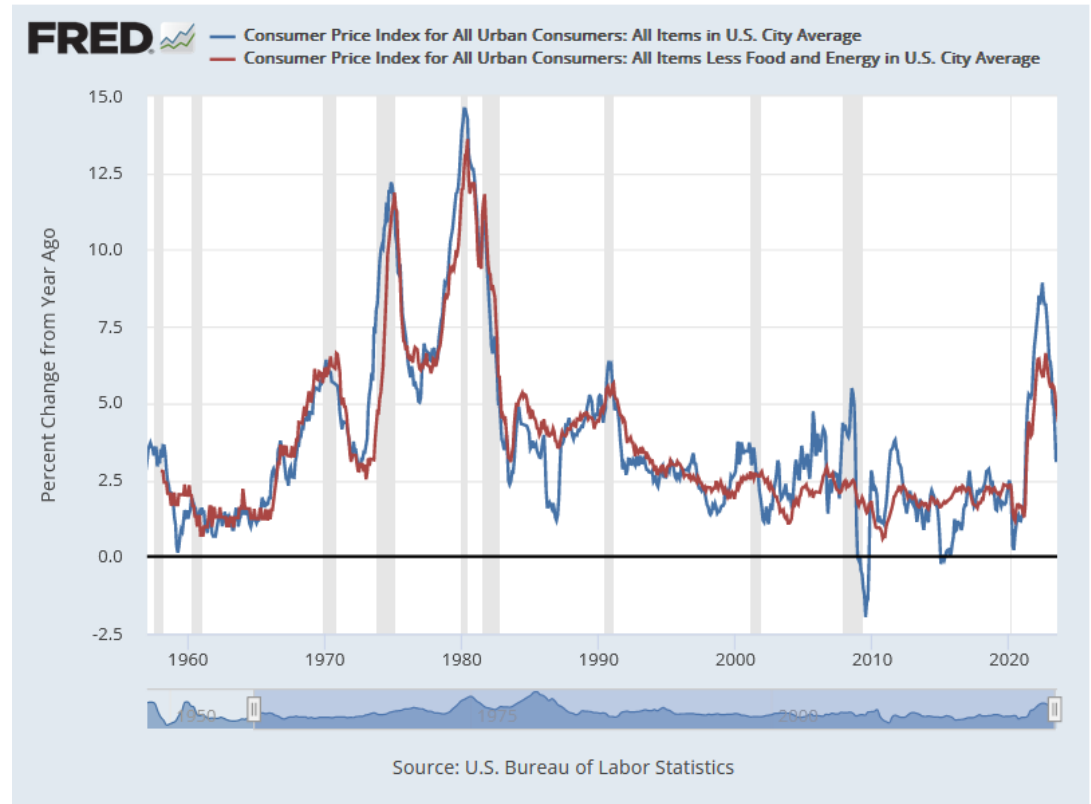
Key Factors Impacting National Economy

- Inflation
 - The Federal Reserve Banks Response
 - Elevated interest rates
- Persistently tight labor market and labor union actions
- Changing consumer behaviors
 - Ending COVID19 related safety net programs
- Shifts in supply chain management
- Round two of the looming federal government shutdown
- Ongoing threat of a looming recession



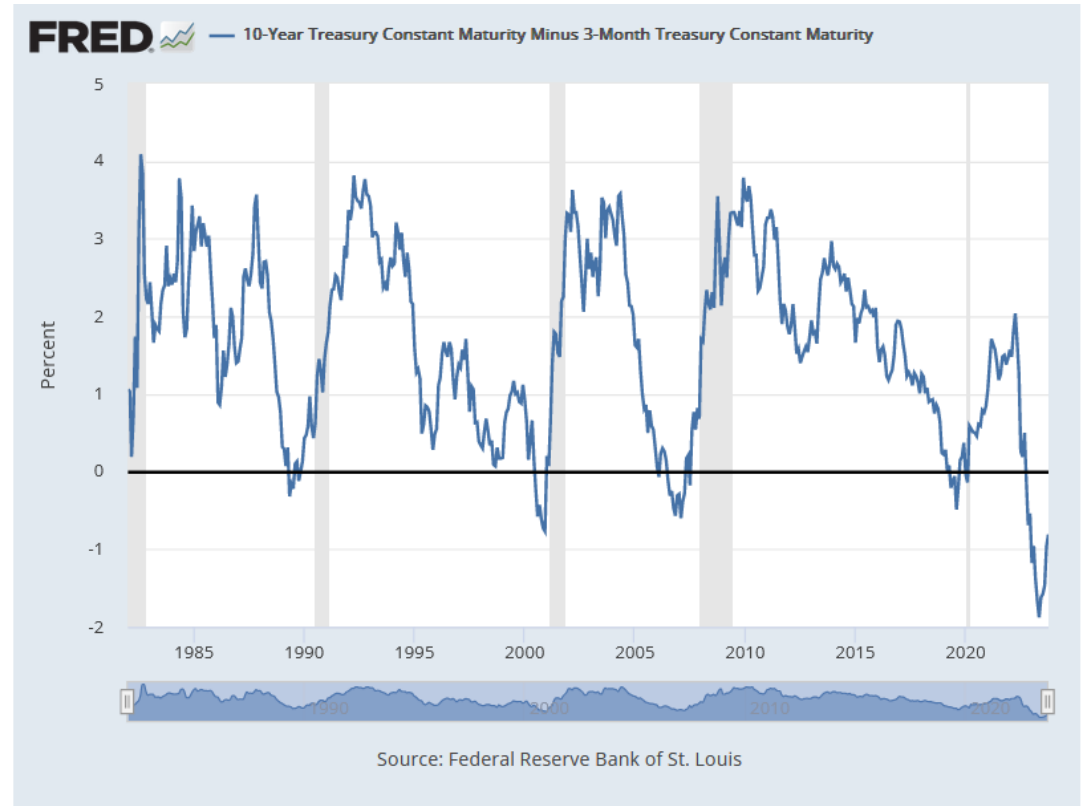
Why so much attention on inflation?

- Inflation is self-perpetuating
- Last week's PCE Price Index was higher than expected fueling more concern about Fed action



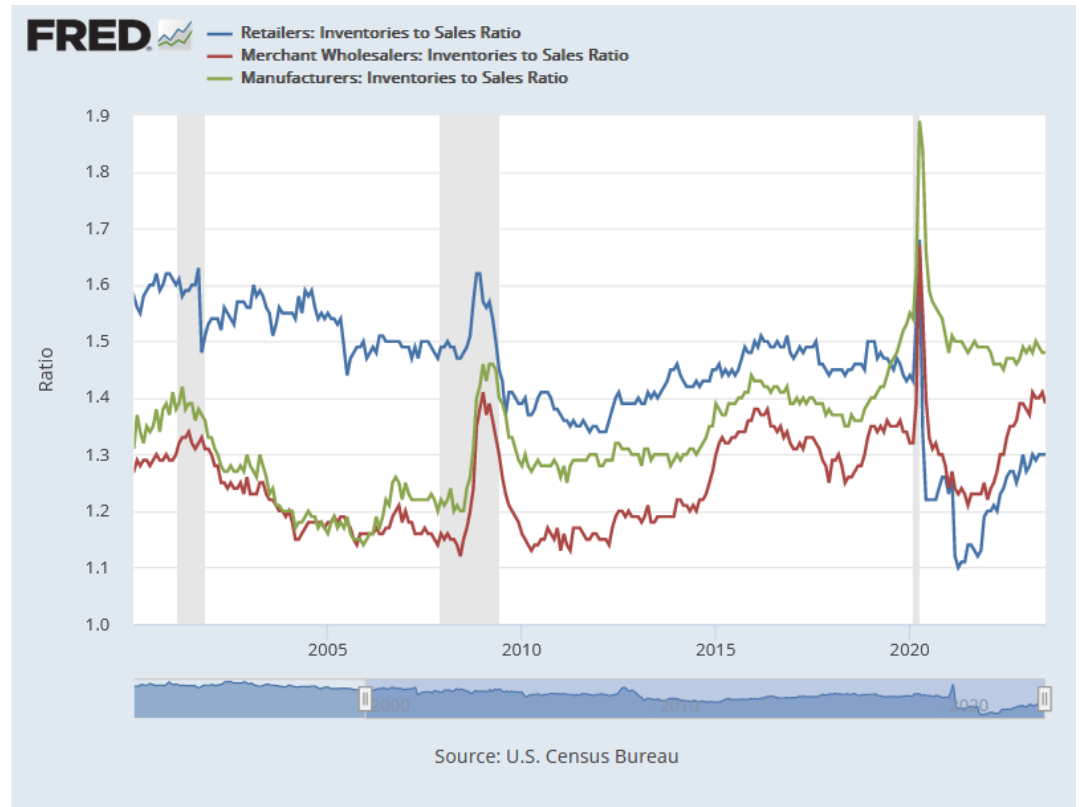
Is a Recession on the Horizon?

- A key measure used by economists suggest yes
- Before most recessions, the yield curve turns negative



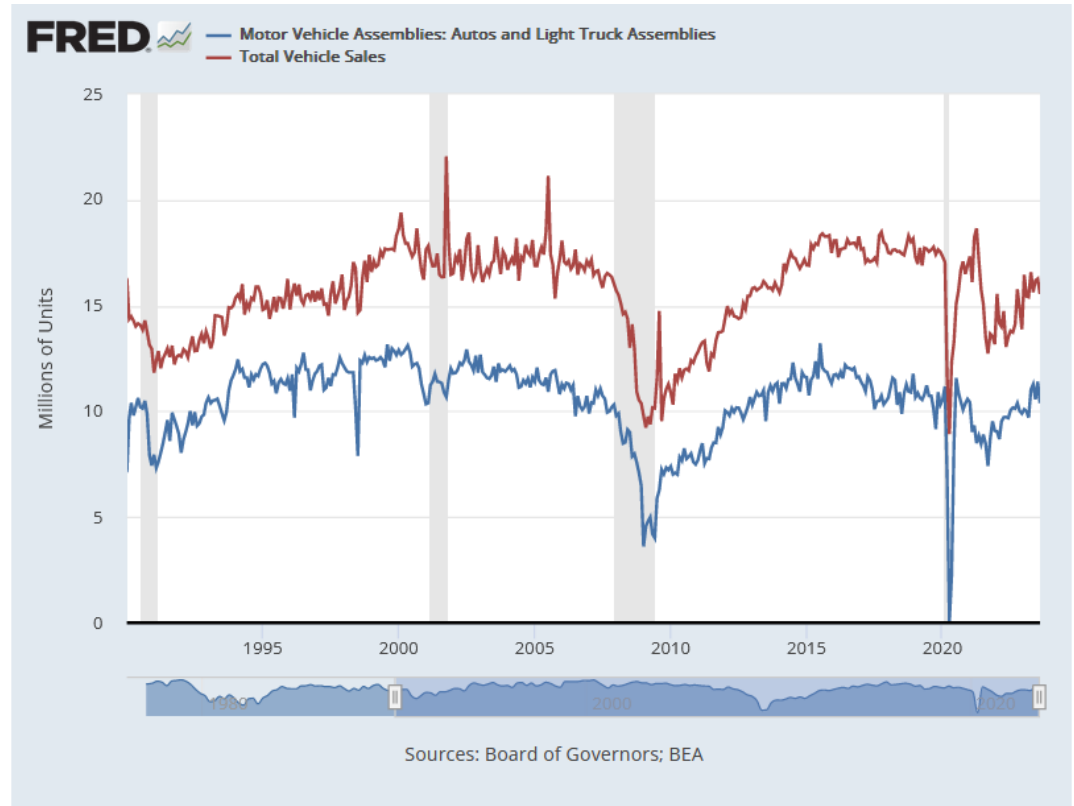
Inventories are often a sign of an impending slowdown

- Excess inventories in the face of slowing orders will give producers pause
- When compared with sales, inventories are a bit high



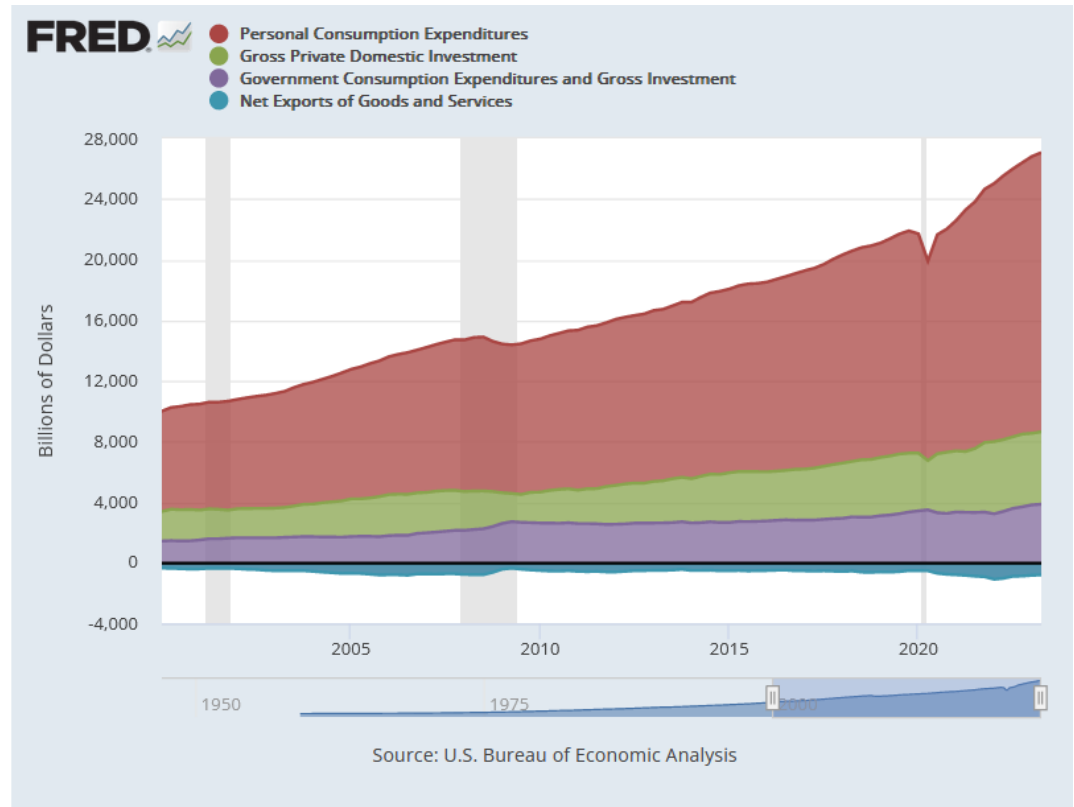
US Vehicle Production and Sales

- Consumers will put off a new vehicle purchase if uncertain about economic future
- With existing inventories manufacturers can weather a temporary strike
- Should the strike carry on into the fourth to sixth week, spillovers are expected into first- and second-tier suppliers



The Consumer has largely kept the economy afloat

- Personal consumption makes up about 2/3 of Gross Domestic Product
- Consumers have spent heavily from savings and from stimulus payments
- There's talk that the consumer has run out of steam



What does this mean for the Michigan?



- We're cautiously optimistic that the US and Michigan economies will avert a major downturn through 2024
- The Fed looks poised to pull off a soft landing – curtailing inflation without causing a major economic disruption
- What may derail this projection is the American consumer
 - Spending spree hangover
 - Spent through savings and maintaining lifestyle through credit card debt
 - Both inflation and higher interest rates are working against them



Michigan Employment Projections



- We anticipate that goods producing sectors will outperform service providing sectors – driven partially by pandemic-related residual consumer spending trends
 - We still vie for those big-ticket items like cars and homes
 - Strong growth in durable goods manufacturing employment
 - Tepid growth in non-durable goods manufacturing employment
 - Leisure and Hospitality sectors will lead service-providing employment growth

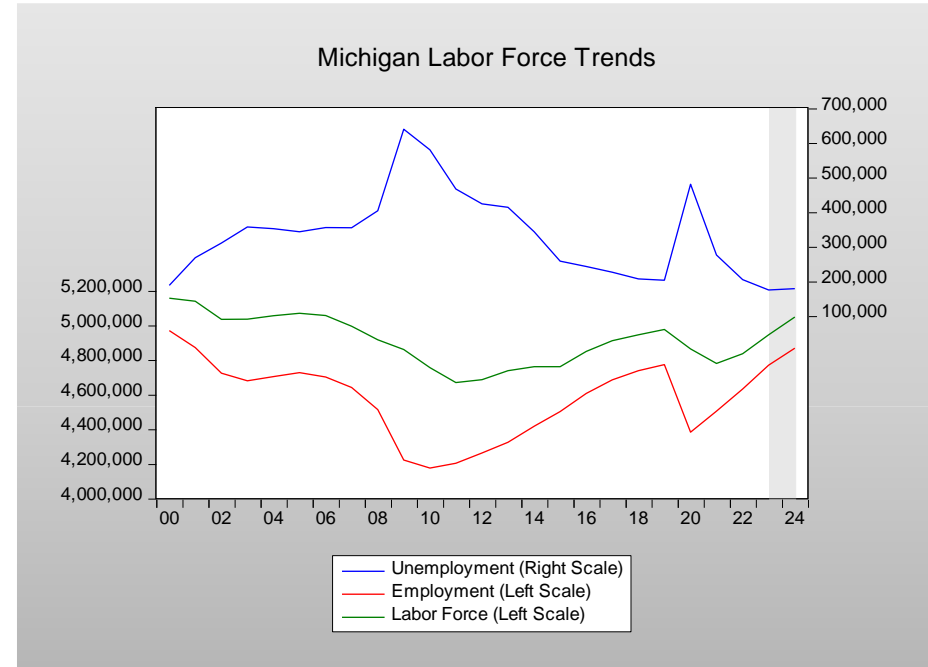
Michigan Employment (000s)	2019	2020	2021	2022	2023	2024
Total Nonfarm	4,442.36	4,039.86	4,198.63	4,362.33	4,469.79	4,555.10
	0.4%	-9.1%	3.9%	3.9%	2.5%	1.9%
Total Private	3,827.31	3,459.18	3,626.25	3,773.47	3,857.24	3,941.84
	0.3%	-9.6%	4.8%	4.1%	2.2%	2.2%
Goods Producing	806.89	727.88	767.33	794.55	821.46	856.16
	0.3%	-9.8%	5.4%	3.5%	3.4%	4.2%
Service-Providing	3,635.26	3,311.86	3,431.52	3,568.00	3,647.98	3,698.94
	0.4%	-8.9%	3.6%	4.0%	2.2%	1.4%



Michigan Labor Force Projections



- From 2021- 2023, employment growth is expected to exceed labor force growth by 7%
 - Starting in 2024, expect the labor force and job growth to be on par for the state
 - Filling positions will continue to be a challenge
 - Increasing the challenge is that worker skills and skill needs are often not spatially aligned
 - Improved labor mobility and worker accommodations may improve access to qualified workers



Lansing Employment Projections



- The Lansing area employment projections show more robust growth
 - Strong growth in goods producing sectors, especially transportation equipment manufacturing
 - Construction employment and non-durable goods manufacturing employment growth retain momentum through 2024
 - In the service sectors, government, education & health services and leisure & hospitality services all show healthy projections
 - Aside from federal government employment, all sectors reflect ongoing growth to various degrees

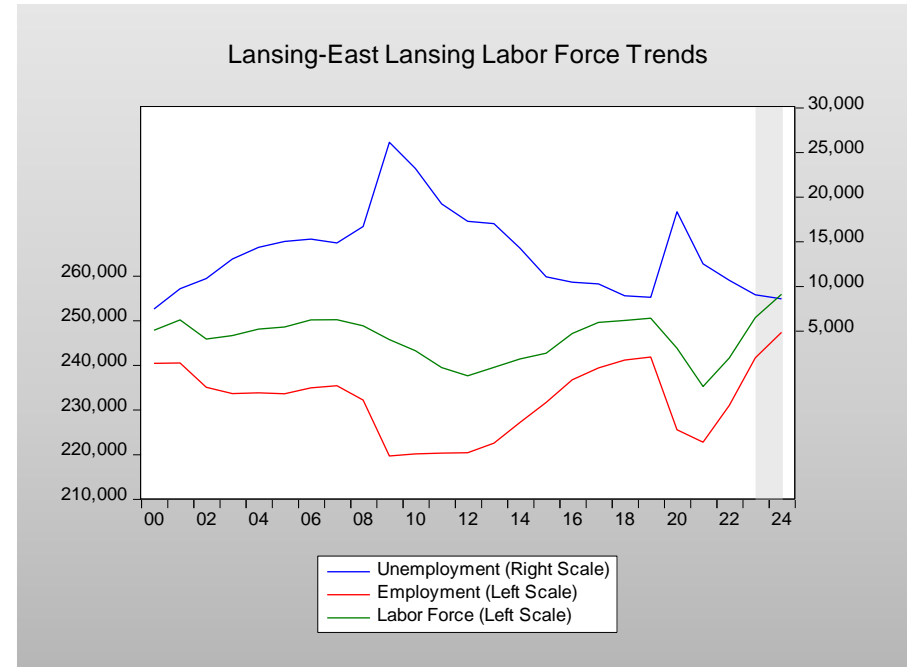
Lansing Employment (000s)	2019	2020	2021	2022	2023	2024
Total Nonfarm	237.68	217.12	220.47	229.71	237.79	243.21
	0.2%	-8.7%	1.5%	4.2%	3.5%	2.3%
Total Private	170.52	155.51	162.48	170.64	175.74	180.37
	-0.2%	-8.8%	4.5%	5.0%	3.0%	2.6%
Goods Producing	27.47	25.87	27.67	29.77	31.99	34.39
	-2.2%	-5.8%	7.0%	7.6%	7.4%	7.5%
Service-Providing	210.21	191.24	192.81	199.94	205.81	208.81
	0.5%	-9.0%	0.8%	3.7%	2.9%	1.5%



Lansing Labor Force Projections



- Employment has grown 4.5% more than the labor force since 2021
 - Employment growth will be higher in the Lansing area
 - Expect further tightening of the labor market – at least through 2024





MICHIGAN STATE
U N I V E R S I T Y

Department of Agricultural,
Food, and Resource Economics

MICHIGAN STATE
U N I V E R S I T Y

Extension
Center for Economic Analysis

Detailed projections and discussions can be retrieved at:

cea.msu.edu

Michigan Output and Income Projections



- Gross State Product is the broadest measure of economic activity tracked at the state level
 - We project Michigan output growth to moderate in 2023 and 2024 in current dollar values
 - Due to high rates of inflation, output growth in inflation-adjusted values are expected to etch down in 2023 and remain flat in 2024
- Current dollar personal income will contract in 2023 with the end of pandemic-relief programs
- Earnings will catch a wave of wage and salary increases for narrow gains

State Output & Income	2019	2020	2021	2022	2023	2024
Gross State Product (\$ Millions: Current)	532,217	520,105	572,206	620,696	653,042	679,423
	2.3%	-2.3%	10.0%	8.5%	5.2%	4.0%
Real GSP (Chained 2012 \$ Mill)	467,107	448,455	481,778	490,318	484,790	487,280
	0.1%	-4.0%	7.4%	1.8%	-1.1%	0.5%
Personal income (\$ Millions: Current)	495,269	537,494	567,807	590,176	548,365	591,350
	3.6%	8.5%	5.6%	3.9%	-7.1%	7.8%
Earnings by place of work (\$ Millions: Current)	336,906	336,297	361,320	390,478	391,484	421,708
	2.7%	-0.2%	7.4%	8.1%	0.3%	3.8%



Lansing Output and Income Projections



- Gross State Product can also be measured at the municipal level
 - Relative to the state, the Lansing-East Lansing statistical area is poised for more robust growth through 2024
 - We expect a decline in inflation-adjusted GSP for 2023 and no real change for 2024.
 - For the same reason as for the state, a sharp reduction in pandemic-related stimulus will result in a decline in personal income in 2023, but a rebound in 2024
- Like the state, we anticipate wage growth to positively affect earnings moving forward

Lansing Area Output	2019	2020	2021	2022	2023	2024
Gross State Product (\$ Millions: Current)	26,942.6	27,043.4	29,363.6	31,481.9	32,924.9	34,157.1
	2.9%	0.4%	8.6%	7.2%	4.6%	3.7%
Real GSP (Chained 2012 \$ Mill)	23,535.4	23,041.5	24,604.1	24,826.6	24,476.5	24,544.4
	0.7%	-2.1%	6.8%	0.9%	-1.4%	0.3%
Personal income (\$ Millions: Current)	20,655	22,617	23,965	24,833	23,480	24,577
	3.6%	9.5%	6.0%	3.6%	-5.4%	4.7%
Earnings by place of work (\$ Millions: Current)	15,346	15,623	16,674	17,702	18,401	19,063
	2.7%	1.8%	6.7%	6.2%	3.9%	3.6%



Mid-Michigan Commercial Real Estate Update

Market Insights Greater Lansing Area

Samantha Le: Associate, Retail Advisor



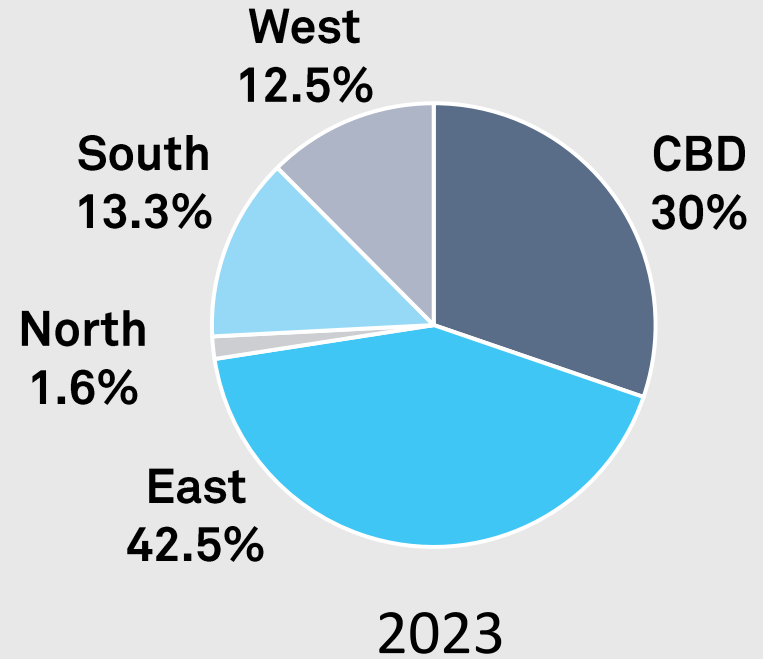
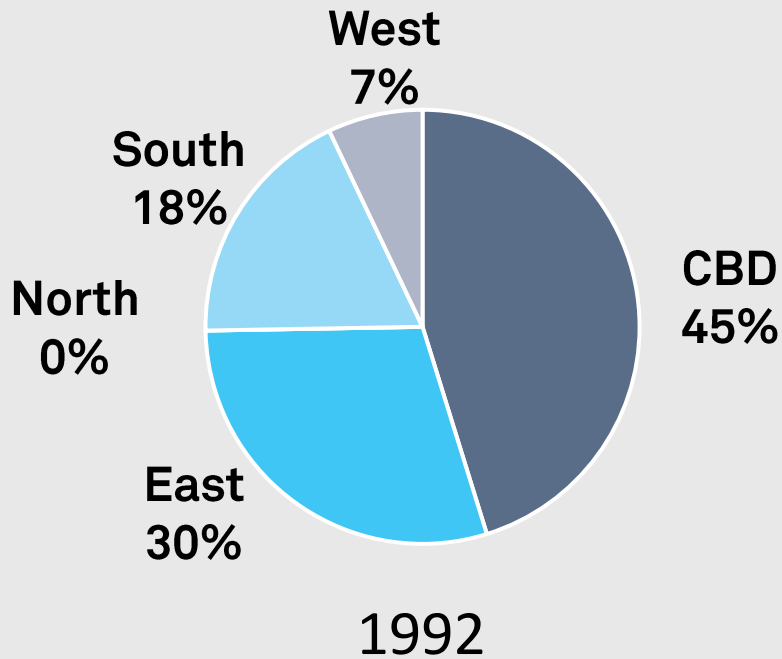
Reliability you can trust. Results you can depend on.



Office Market Index Brief - Greater Lansing

Office Market

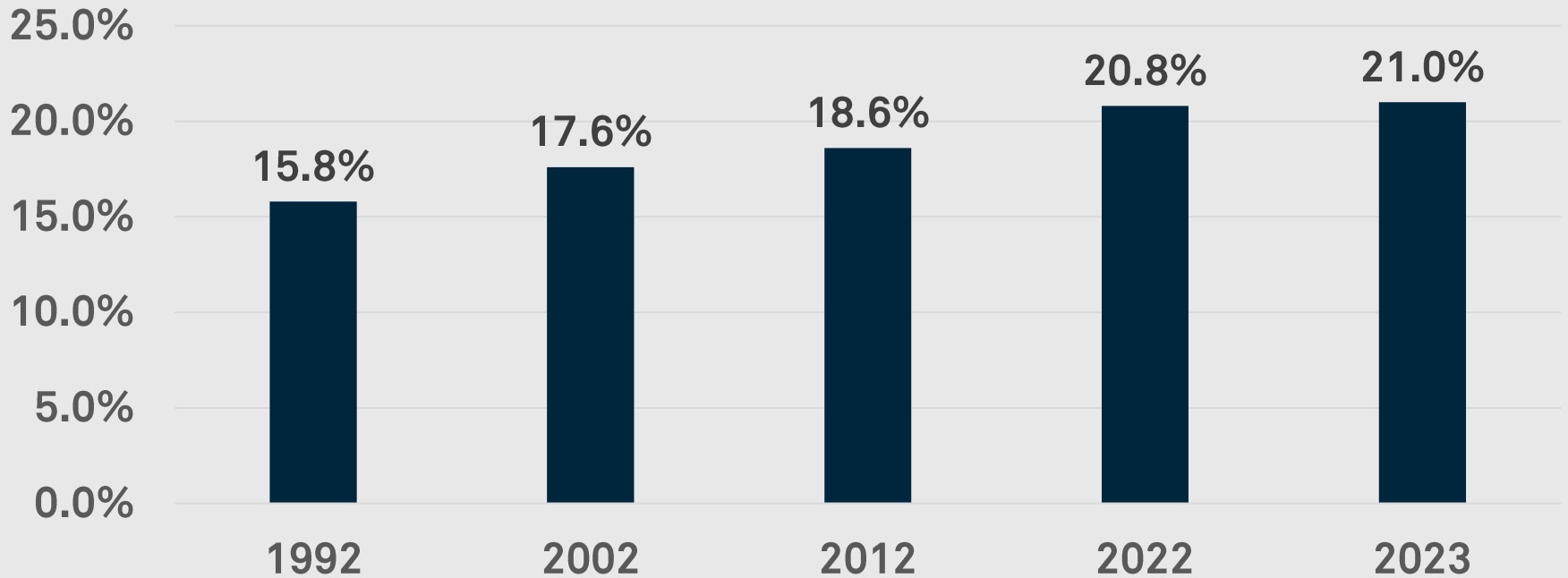
1992 vs. 2023



Office Market Index Brief – Greater Lansing

Office Vacancy

1992-2023



Reliability you can trust. Results you can depend on.



Office Market Index Brief – Greater Lansing

Downtown Lansing

- Current Market Conditions
- Population density
- Direction of State of Michigan



Office Market Index Brief – Greater Lansing

Future Outlook

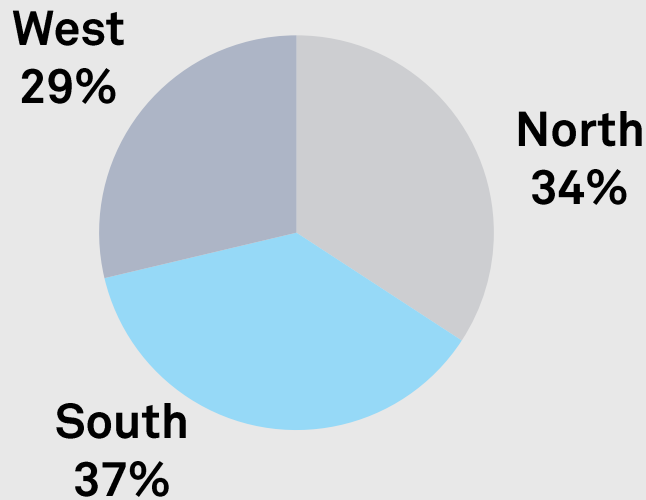
- Period of adaptability
- Workplace strategies



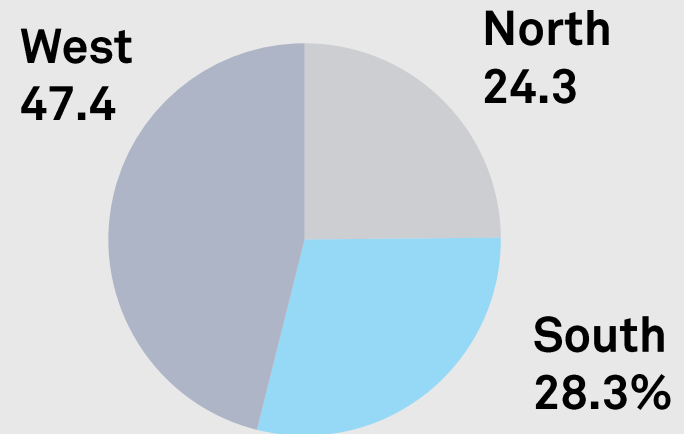
Industrial Market Index Brief – Greater Lansing

Industrial Market

2003 vs. 2023



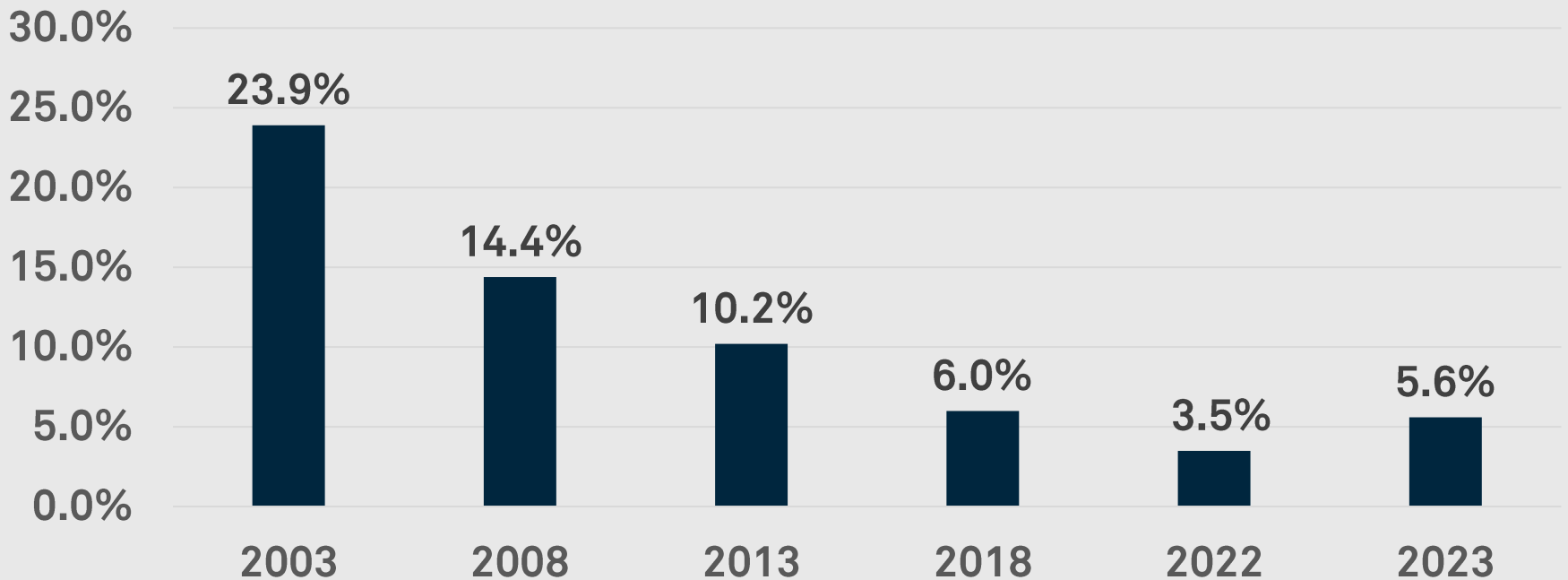
2003



2023

Industrial Market Index Brief – Greater Lansing

Industrial Vacancy 2003-2023



Reliability you can trust. Results you can depend on.



Industrial Market Index Brief – Greater Lansing

Industrial Trends

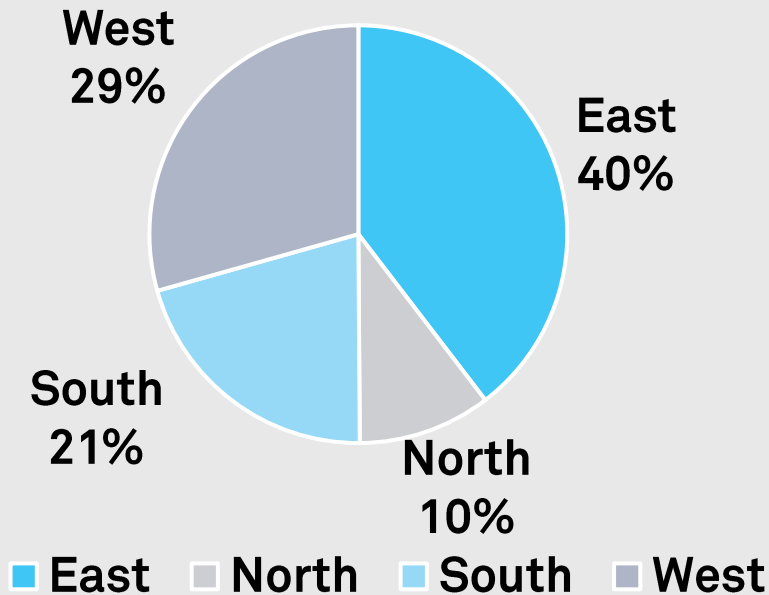
- No speculative construction
- Cannabis effect
- Ecommerce and distribution
- Lack of supply
- Minimal landlord concessions



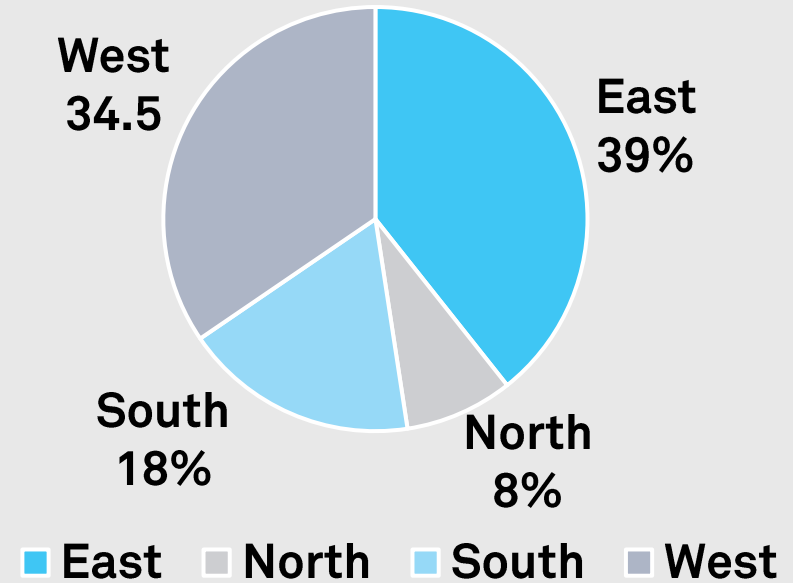
Retail Market Index Brief – Greater Lansing

Retail Market

2003 vs. 2023



2003

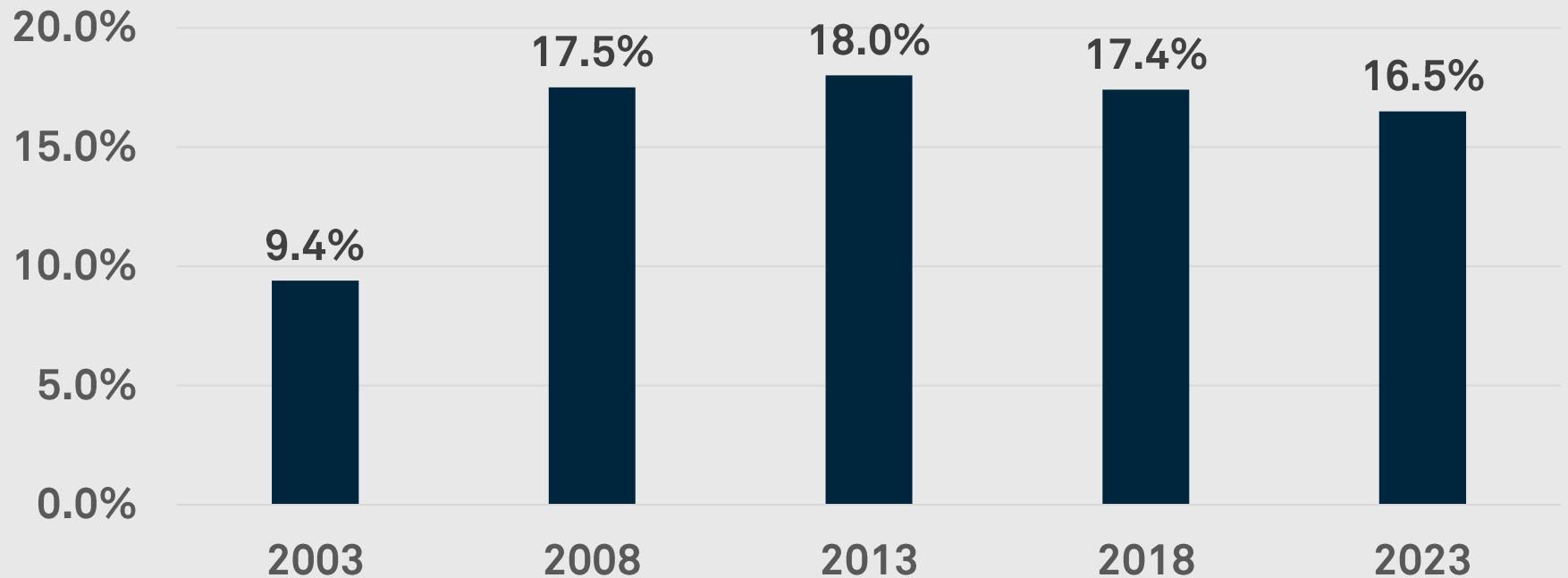


2023

Retail Market Index Brief – Greater Lansing

Retail Vacancy

2003-2023



Reliability you can trust. Results you can depend on.



Retail Market Index Brief – Greater Lansing

Retail Trends

- Omni - Channel
- Entertainment
- De-Malling
- Staffing Issues
- Retail Development in Mid-Michigan



Factors Affecting All Three Specializations

- Rising Interest rates
- High Cost of Construction

About Martin Commercial Properties

Core Business Lines

- Brokerage
- Property Management
- Project Management
- Investment
- Corporate Services

Market Insight Reports

Subscribe to our Market Insight Reports and get the reports e-mailed bi-annually



Fiscal Outlook for the Lansing Metropolitan Area

Dr. Eric Scorsone
Director and Associate Professor

Center for Local Government Finance and Policy
Department of Agricultural, Food and Resource Economics and MSU Extension
Michigan State University



Lansing Metro Area General Purpose local governments

18 cities

20 villages

64 townships

102 general purpose local governments

55 special purpose governments

157 total local governments in this region

Approx. \$700 million in total revenue



The Fiscal Equation: Revenue trends



Local Revenue Sources



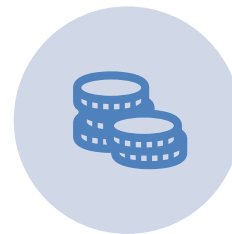
Property Taxes –
General and Special



State Revenue
sharing



City income taxes



Fees and charges



State Revenue Sharing

Constitutional – based on the state constitution, 15% of the 4% proportion of the state sales tax is dedicated to local governments

- \$1.1 billion in FY 2023-24 for CVT

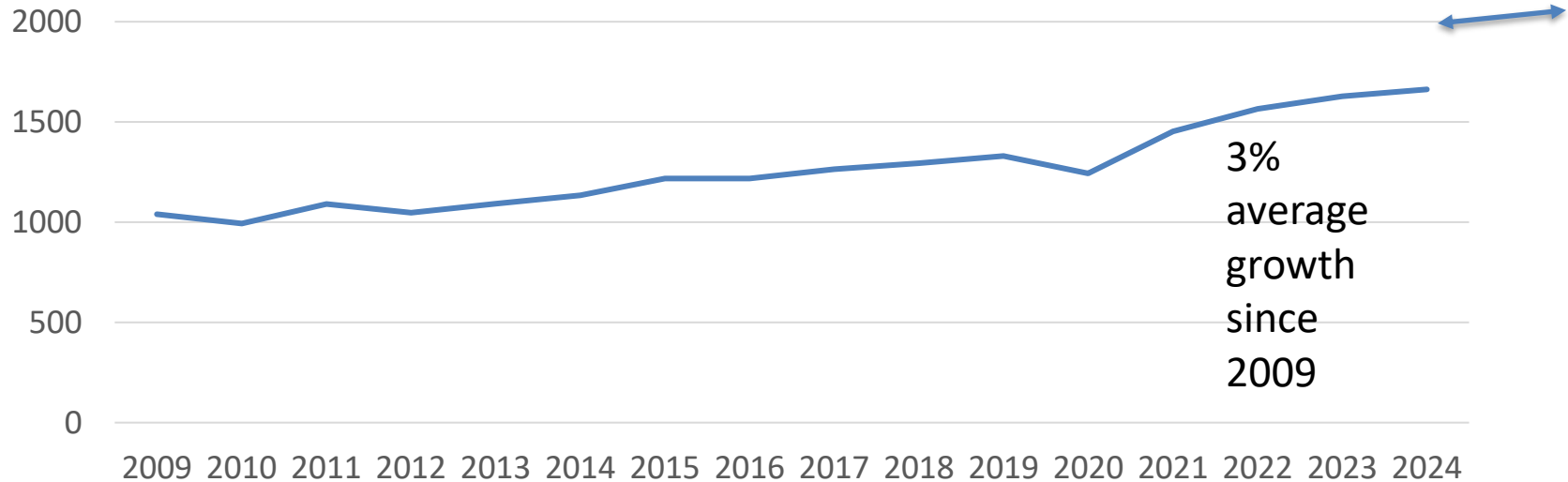
Statutory – based on legislative discretion

- \$293 million for CVT
- \$243 million in county revenue sharing



State Revenue Sharing

State Revenue Sharing Trends 2009-2024



* Excludes federal funds



City Income Tax

- Conditions set by state law and must be passed by local voter referendum
- Lansing, East Lansing
- Driven by number of jobs, income per job, commuting patterns (in vs. out of jurisdiction)
- Source of higher growth in revenues but also source of instability



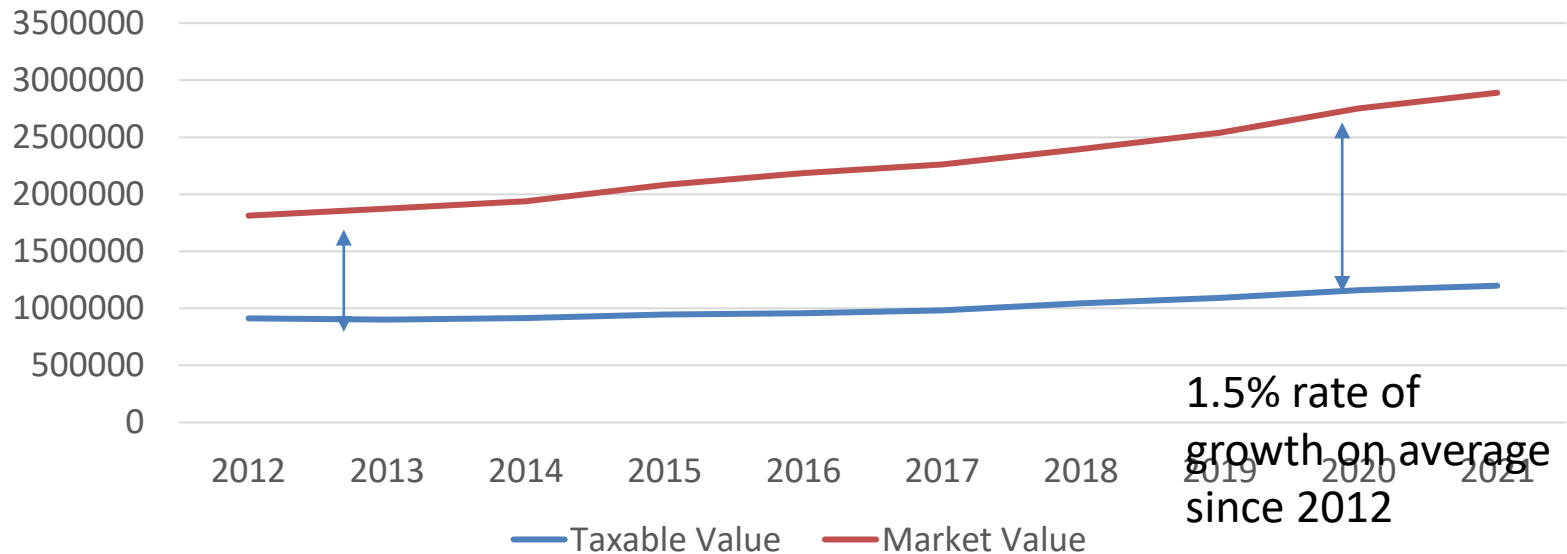
Local Property Taxes

- Nearly every local jurisdiction collects a property for operations
- General operating tax
- Special property tax (earmarked)
- Generally best-case scenario is for 2-3% average annual growth



Market and Tax Value, East Lansing

Market value vs Taxable value, 2012-2022



Federal Investment in Local Govt (ARPA)

County governments approx. \$100 mil.

Lansing and East Lansing \$60 million

Other local govts. \$20 million

\$180 million flowed into our region



The Fiscal Equation: Spending Pressures and Trends



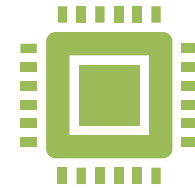
Cost Issues



Labor Force (60-70 percent of the budget)



Pension and Health Care (large portion of overall "labor" costs)

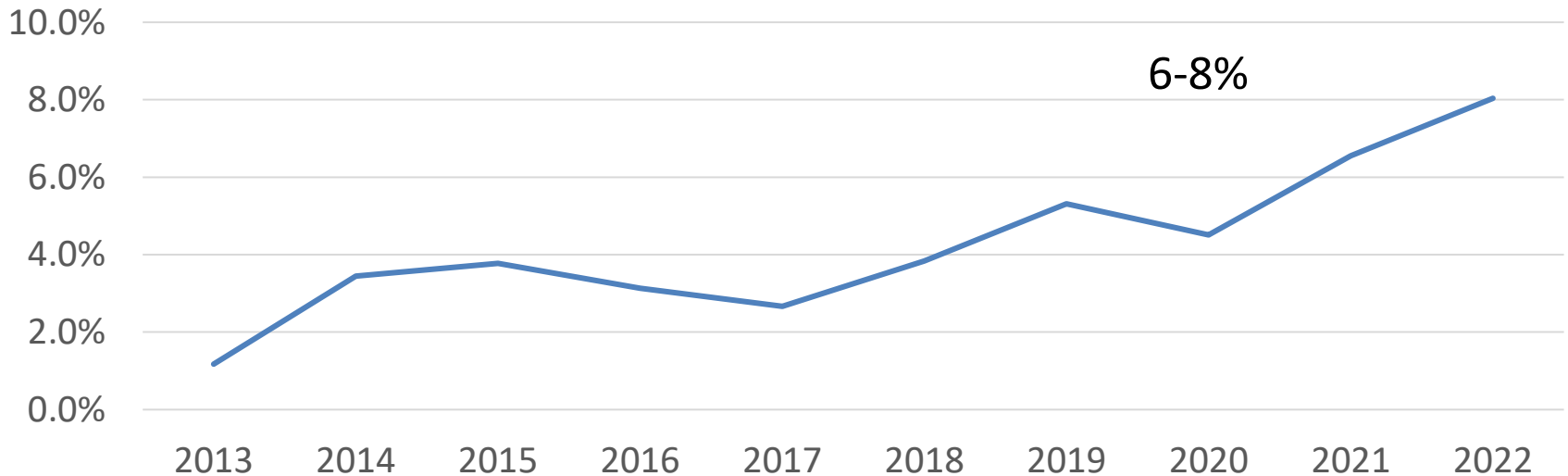


Infrastructure (the big unknown)



Local govt Inflation Rate – Spending Pressure

inflation rate



Labor and Workforce



Described as a “labor drought” by President of Richmond federal Reserve



Local governments have lost a lot of workforce over the last decade, many open positions exist today in core functions



This labor issue represents potentially hidden cost pressures and potentially lack of services raising costs to businesses and citizens



Pension and Retiree Health Care Costs



Many local Governments offered and still offer in some form pension and retiree health care



For some governments, these cost burdens became very large relative to the size of revenues

Detroit bankruptcy centered on this issue in 2013

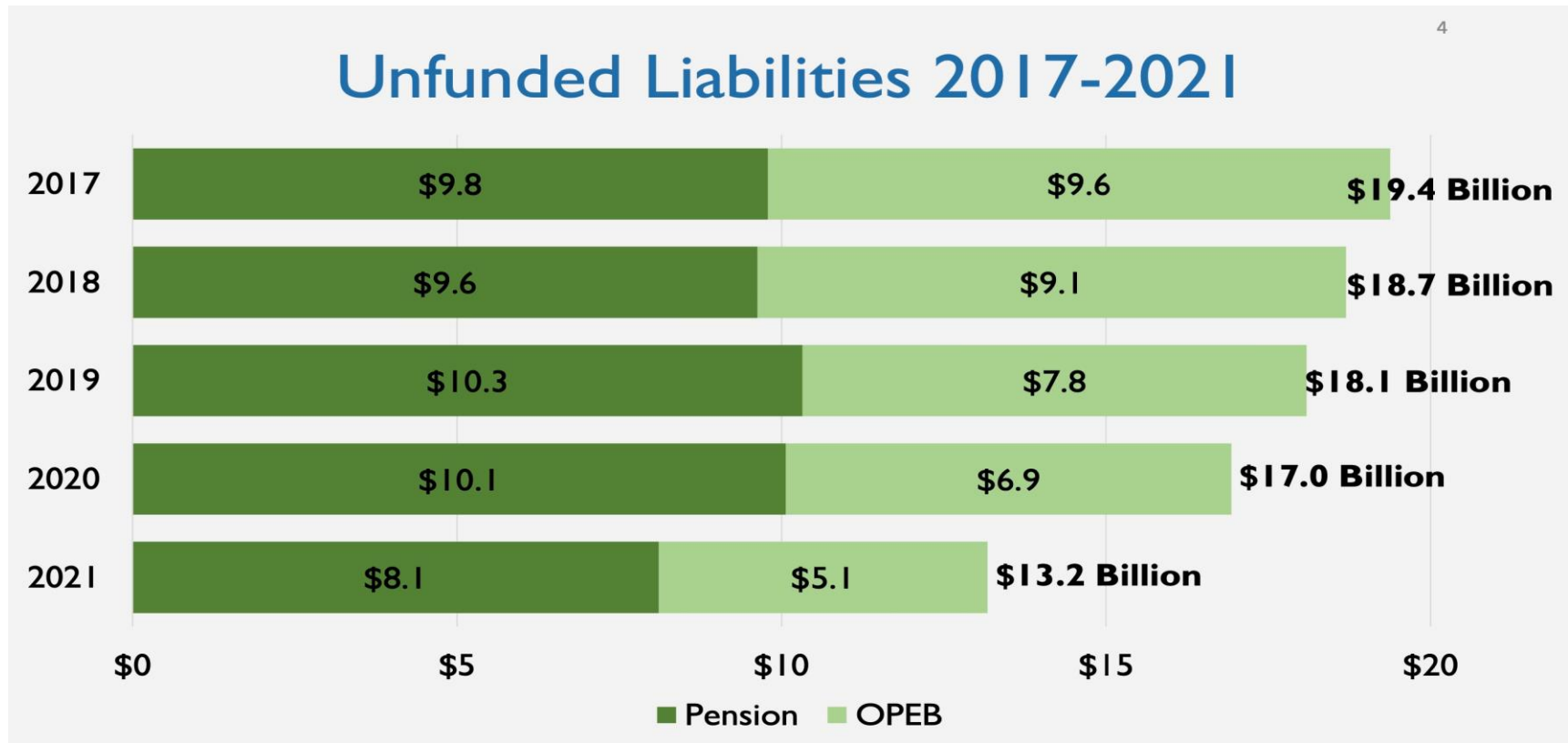


In our region

55 local governments had a pension or retiree health care system so about 1/3 of the total
19 required a corrective action plan, only 6 have current plans



Statewide Pension & Retiree Health Care Cost



Fiscal Outlook 2024-2025



Revenue growth will slow for most local governments but cost pressures will continue to grow to maintain services and infrastructure



Expect tighter budgets in the next two years



High degree of economic uncertainty and higher-level government uncertainty means budgeting with a safety cushion



- Thank you!

- **MSU Extension Center for Local Government Finance and Policy**
 - We provide assistance to local governments across the state on a number of issues
 - You can reach me at Scorsone@msu.edu
 - Our website is https://www.canr.msu.edu/center_for_local_government_finance_and_policy/
 - Or Google “MSU Center for local government”



WATERTOWN CHARTER TOWNSHIP
 BILL LIST FOR MEETING
 OCTOBER 16, 2023

ATTACHMENT 4
 BOT 10/16/23

VENDOR	PURPOSE	AMOUNT
***PAYROLL PAID 09-29-23 ***		
ELECTRONIC FEDERAL DEPOSIT	GF TWP SHARE SOCIAL SECURITY & MEDICARE	\$2,629.01
PAYROLL	GF PAYROLL FOR STAFF, BOARDS AND COMMITTEES	\$34,274.64
MERS	GF TWP SHARE RETIREMENT CONTRIBUTION COSTS	\$4,955.41
TOTAL		\$41,859.06
GENERAL FUND TOTAL	\$41,859.06	
BILLS PAID 10-02-23		
BRUTSCHE CONCRETE PRODUCTS	CF FINAL PAYMENT FOR COLUMBARIUM	11,920.00
BUSINESS CREDIT CARD	GF CASE - CEMETERY CONCRETE, TANK FILTER,	228.15
	GF MINTON - HUNTER MINTON CONFERENCE REGIST	1,171.69
	GF TUBBS - FLAGPOLE, SIGNAGE	2,184.08
CAROLYN BROKOB	GF MILEAGE REIMBURSEMENT	149.34
CLINTON COUNTY ROAD COMMISSION	GF EMULSION, STONE & FOG SEAL	85,167.21
DOLLARHITE, MARSHA	GF DEPOSIT REFUND	50.00
E.H. WARD COMPANY	GF FENCE REPAIR	695.00
GIFFELS WEBSTER	GF MASTER PLAN FINAL EDITS	520.00
JEFFREY S. MACKENZIE	GF ASSESSOR 09/16-30/2023	3,589.75
JEH PLUS LLC	TF 2023 Sum Tax Refund 150-035-200-070-01	328.08
JOHN E. MAAHS	GF MEDICAL REIMBURSEMENT	167.15
LANSING ICE & FUEL	GF DIESEL TANK	4,321.60
LARISSA KETCHUM	GF DEPOSIT REFUND	50.00
LOOKING GLASS REGIONAL FIRE	GF BUDGET PAYMENT	50,153.27
MCGINTY, HITCH, ET AL.	GF AUGUST LEGAL FEES	3,815.00
MENARD'S	GF ELECTION AND OFFICE SUPPLIES,	68.29
MI GOVT FINANCE OFFICERS ASSOC	GF BIERGANS, HUNTER, MINTON MEMBERSHIPS	390.00
NORTHWESTERN MUTUAL LIFE	GF DISABILITY INSURANCE	974.02
OSMAR, CARTER	GF DEPOSIT REFUND	50.00
PROVIDENCE	GF LABOR - ELECTION LAPTOPS, TECHCARE	2,510.04
QUILL CORPORATION	GF OFFICE SUPPLIES, TONER	289.97
R.M. ELECTRIC, INC	GF DELIVER LIFT FOR WTT USE	600.00
ROSE PEST SOLUTIONS	GF PEST CONTROL	69.00
S.C.C.M.U.A.	SF MONTHLY PAYMENT, GENERATOR	41,417.47
STANDARD INSURANCE COMPANY	GF LIFE INSURANCE	209.64
STRYKER MEDICAL	GF DEFIBRILLATOR	2,184.76
TRI-COUNTY REGIONAL PLANNING	GF FAIR SHARE PLEDGE OF GROUNDWATER	1,887.00
WARNER, SHELLY	GF DEPOSIT REFUND	50.00
TOTAL		\$104,668.46
GENERAL FUND TOTAL	\$51,002.91	
SEWER FUND TOTAL	\$41,417.47	
CEMETERY FUND	\$11,920.00	
TAX FUND	\$328.08	

WATERTOWN CHARTER TOWNSHIP
 BILL LIST FOR MEETING
 OCTOBER 16, 2023

VENDOR	PURPOSE	AMOUNT
***PAYROLL PAID 10-13-23 ***		
ELECTRONIC FEDERAL DEPOSIT	GF TWP SHARE SOCIAL SECURITY & MEDICARE	\$2,333.61
PAYROLL	GF PAYROLL FOR STAFF, BOARDS AND COMMITTEES	\$30,504.82
MERS	GF TWP SHARE RETIREMENT CONTRIBUTION COSTS	\$4,620.97
TOTAL		\$37,459.40
GENERAL FUND TOTAL	\$37,459.40	
BILLS PAID 10-13-23		
ACD	GF TELEPHONE EQUIPMENT	\$234.53
ANDREW CASE	GF MEDICAL REIMBURSEMENT	\$499.32
CAROLYN BROKOB	GF MEDICAL REIMBURSEMENT	\$834.42
CLARK, JACOB	TF SUMMER TAX REFUND	\$12.63
CONSUMERS ENERGY	GF STREETLIGHTS	\$2,513.31
	GF PARK AND RIDE LOT	\$37.47
	GF WATERTOWN CHARTER TOWNSHIP	\$197.05
COSTELLO, FRANK	TF SUMMER TAX REFUND	\$12.82
CULLIGAN OF LANSING	GF BOTTLED WATER	\$21.00
DIVERSIFIED NATIONAL TITLE AGENCY	TF SUMMER TAX REFUND	\$18.26
G.A.HUNT SEPTIC	GF PUMP SEPTIC SYSTEMS	\$690.00
IACOBELLIS DOMINIC	TF SUMMER TAX REFUND	\$24.67
JAY GALLIMORE	GF REFUND OF OVERPAYMENT	\$0.14
JEFFREY MACKENZIE	GF ASSESSOR 10/01-15/2023	\$3,589.75
KILBOURN KEVIN	TF SUMMER TAX REFUND	\$14.46
MICHIGAN FLEET FUELING	GF FUEL	\$350.18
QUILL	GF OFFICE SUPPLIES	\$378.37
SIMON ROGER	TF SUMMER TAX REFUND	\$10.02
SMITH JOHN	TF SUMMER TAX REFUND	\$10.28
THE PLANT PROFESSIONALS	CF CEMETARY COLUMBARIUM GARDEN	\$2,160.20
THOMPSON TIFFANY	GF DEPOSIT REFUND	\$50.00
VERIZON	GF CELL PHONES	\$212.80
	GF	
TOTAL		\$11,871.68
GENERAL FUND TOTAL	\$9,608.34	
TAX FUND TOTAL	\$103.14	
CEMETERY FUND	\$2,160.20	

WATERTOWN CHARTER TOWNSHIP
 BILL LIST FOR MEETING
 OCTOBER 16, 2023

VENDOR	PURPOSE	AMOUNT
BILLS TO BE PAID 11-01-23		
JEFFREY S. MACKENZIE	GF ASSESSING SERVICES	\$3,589.75
LOOKING GLASS FIRE REGIONAL	GF MONTHLY PAYMENT	\$50,153.27
S.C.C.M.U.A.	SF MONTHLY SEWER	\$38,122.47
TOTAL		\$91,865.49
GENERAL FUND TOTAL		\$53,743.02
SEWER FUND TOTAL		\$38,122.47

*****BILLS TO BE PAID AFTER BOARD APPROVAL *****

MCGINTY HITCH	SEPTEMBER LEGAL FEES	\$227.50
TOTAL		\$227.50
GENERAL FUND TOTAL		

MEMORANDUM

TO: WATERTOWN TOWNSHIP PLANNING COMMISSION
FROM: ANDREA Z. POLVERENTO, PLANNING DIRECTOR
SUBJECT: MONTHLY REPORT: SEPTEMBER 2023
DATE: AUGUST 30, 2023

Meetings & Events

9/5 – Tri-County Regional Planning Commission Transportation Plan Meeting
9/6 – Regular Planning Commission Meeting
9/7 – AED Training from LGRFA
9/12 – MSU Seminar on eMotional Cities International Project
9/18 – Groundwater Management Plan Advisory Council Meeting
9/18 – Board of Trustees Regular Meeting
9/27 – Airport Master Plan Committee Meeting

Enforcement

No update this month, expecting to regroup the week of 10/9

Development

Staff received an incomplete application for a potential development at the NE corner of Francis and Grand River. When a complete set of plans are received, that will be sent to the Planning Commission for consideration. Still no update on this.

Nottingham Phase 2 Expansion: Temporary construction/secondary access road was begun, rains left some areas particularly waterlogged, coordination with the Clinton County Road Commission & Drain Commissioners office is ongoing. Drainage outlet structure still not installed, Road Commission is still waiting on the bond to be received. Will not issue any permits until these items are addressed.

Peckham's farm operation suffered significant damage from the wind/tornado last month. Working closely with them on permitting for the damaged structures. They are also making a minor update to their parking area to add a few additional spaces. Expect a site plan in the spring for additional projects.

Continue to work with a National Parkway business to obtain proper permits for a new use and to adjust their existing signage.

Working with building department regarding storm damage and other permitted updates at the Waste Management site.

Deer Creek contractor attempted to put down the top course of asphalt on the remainder of Thunder Lane. Contractor did not discuss project with the township, SCCMUA, or Clinton County Road Commission and was unable to meet their requirements. Alternate contractors were suggested.

The Lakeside Plat for Phase 10 is still in limbo, as EGLE rejected the plans again.

Solar SLUP applications required detailed attention as this was the first project of this type received.

ZBA

The ZBA did not meet in September, and is not expected to meet in October.

Master Plan Update

Posted updated plan on website, mailings for 63-day review process distributed on Sept. 18.

Other

Met with consultant for the Capital Region International Airport master plan to discuss questions/comments from initial project meeting.

The storm on 8/24 has continued to cause issues/concerns as residents are doing tree work along property lines, and applying for permits for damaged structures.

Several meetings and inspections related to the Nottingham development were held this month.

Issued an occupancy permit for a home on Rachael Fairfax Drive, notified all emergency services in Clinton and Eaton counties of the circumstances and provided details to new homeowner to establish a Smart911 profile.

Received preliminary copy of Phase 2 Groundwater Testing Report, preparing for October presentation at BOT.

Discussions with various property owners regarding land divisions, billboard storm damage, reopening a gravel pit, ag buildings, zoning complaints, etc. Walk-in traffic with questions for staff high this month due to the tax payment deadline. Planning & Zoning Assistant shares responsibility with Treasurer's office, she was extremely busy this month.

Planning & Zoning Monthly Report - September 2023

Residential	Current Month	Year to Date
New Residences		19
Residential Additions	1	7
Accessory Buildings/Garages	2	12
Decks and Porches		10
Pools/Ponds/Hot Tubs		3
Home Occupations		1
Sign Permits		
Commercial/Industrial	Current Month	Year to Date
New /Remodel/Additions	1	3
Sign Permits	1	3
Cell Towers and Related		1
Residential Solar		1
Agricultural	Current Month	Year to Date
AG Buildings	1	4

Certificates of Occupancy Issued:

	Current Month	Year to Date
Residential	1	10
Commercial/Industrial		5

TREASURER'S INVESTMENT MEMO

To: Supervisor Maahs, Clerk Brokob, Trustees Cooley, Overton, Madill, and Hufnagel

From: Sue Biergans, Treasurer

RE: September Investment Activity

Date: October 9, 2023

During the month of September 2023, the following interest received:

MI-Class	Total Interest added	\$16,342.13
MI-Class Edge	Total Interest added	\$ 7,420.63
Multi-Bank Securities	Total Interest added	\$ 9,201.75
Horizon Bank	Total Interest added	\$ 915.39

Percent of investment portfolio per financial institution is:

CIBC	Consumers CU	Dart	Flagstar	Horizon	MI CLASS	MI CLASS EDGE	MBS	Mercantile
\$150,000.00	\$200,000.00	\$122,500.00	\$101,699.93	\$130,137.56	\$1,944,887.56	\$946,998.65	\$133,434.00	\$100,000.00
\$156,300.21		\$100,000.00		\$128,834.37	\$4.32	\$26,305.53	\$133,324.50	\$100,000.00
		\$122,500.00		\$103,449.83	\$5,137.20	\$946,998.65	\$145,515.00	\$250,000.00
					\$824,128.93	\$332,501.73	\$195,994.00	
					\$463,726.37	\$10,522.23	\$195,498.00	
					\$12,640.74		\$201,494.00	
					\$200,812.06		\$250,000.00	
					\$5,326.54		\$200,000.00	
					\$53,584.21		\$247,685.00	
					\$74,469.67		\$249,000.00	
							\$250,000.00	
							\$250,000.00	
							\$223,510.00	
							\$87,661.00	
							\$197,894.00	
							\$247,442.50	
							\$250,415.00	
							\$250,000.00	
							\$250,000.00	
							\$250,000.00	
							\$178,314.00	
							\$176,618.00	
\$306,300.21	\$200,000.00	\$345,000.00	\$101,699.93	\$362,421.76	\$3,584,717.60	\$2,263,326.79	\$4,563,799.00	\$450,000.00
\$12,177,265.29								
2.52%	1.64%	2.83%	0.84%	2.98%	29.44%	18.59%	37.48%	3.70%

SCHEDULE OF INVESTMENTS FOR SEPTEMBER 2023

ITEM #	Year	Fund or Investment Description	Purchase Amount	Adjustment '+ OR -	Purchase Date	Maturity Date	Interest %	Interest Earned	Value at Maturity	Market Value
GENERAL FUND										
24	2001	MI-Class		\$1,822,821.68	1-Oct-07	PMMA	5.47%	\$165,905.04	\$1,944,887.56	
19	2021	MI-Class EDGE	\$900,000.00		23-Dec-21	PMMA	5.23%	\$47,849.43	\$946,998.65	\$913,918.05
22	2019	MBS 4.5yrs	\$250,000.00		12-Nov-19	12-May-23	1.65%	\$12,002.00		\$247,685.00
24	2020	Horizon 3 yr	\$130,137.56		2-Dec-20	2-Dec-23	0.38%	\$84.83	\$130,137.56	
26	2020	MBS 5yr	\$150,000.00		30-Nov-20	28-Nov-25	0.50%	\$1,871.92	\$133,434.00	\$133,434.00
3	2021	Dart 2 yr	\$122,500.00		16-Apr-21	16-Apr-23	0.30%	\$966.14		
9	2021	Dart Bank	\$100,000.00		6-Aug-21	6-Aug-23	0.25%	\$502.49		
11	2021	MBS 5 yr Gov Bond	\$150,000.00		18-Aug-21	18-May-26	0.88%	\$2,296.88	\$133,324.50	\$133,324.50
1	2022	Mercantile 2 yr	\$100,000.00		10-Feb-22	10-Feb-24	0.30%		\$100,000.00	
3	2022	Horizon 1 yr	\$128,834.37		18-Apr-22	18-Apr-23	1.60%	\$2,061.35		
4	2022	MBS 3 yr.	\$150,000.00		6-Sep-22	8-Sep-25	3.40%	\$4,233.70	\$145,515.00	\$145,515.00
5	2022	MBS 2 yr.	\$200,000.00		2-Sep-22	20-Sep-24	3.40%	\$5,644.89	\$195,994.00	\$195,994.00
6	2022	MBS 3 yr.	\$200,000.00		20-Sep-22	20-Sep-25	3.70%	\$6,143.00	\$195,498.00	\$195,498.00
9	2022	Dart 13 months	\$122,500.00		25-Oct-22	25-Nov-23	3.75%		\$122,500.00	
11	2022	CIBC 18 months	\$150,000.00		3-Nov-22	3-May-24	4.20%		\$150,000.00	
12	2022	Horizon 2 yr	\$103,449.83		8-Dec-22	2-Dec-24	4.35%	\$768.41	\$103,449.83	
13	2022	MBS 2 yr.	\$200,000.00		15-Dec-22	16-Dec-24	5.00%	\$5,809.65	\$201,494.00	\$201,494.00
15	2022	FlagStar 1 yr	\$101,699.93		13-Dec-22	13-Dec-23	4.28%		\$101,699.93	
1	2023	MBS 5 yr.	\$250,000.00		20-Jan-23	20-Jan-26	4.75%	\$6,897.26	\$250,000.00	
2	2023	Mercantile 6 months	\$200,000.00		3-Mar-23	30-Aug-23	4.00%	\$3,966.51		
3	2023	Consumers Credit Union	\$200,000.00		6-Mar-23	6-Mar-24	4.85%		\$200,000.00	
4	2023	MBS 3 yr.	\$200,000.00		2-Mar-23	23-Mar-26	4.80%	\$4,024.10	\$200,000.00	
6	2023	Horizon 1 yr	\$128,834.37		18-Apr-23	18-Apr-24	4.53%	\$1,450.56	\$128,834.37	
7	2023	Dart Bank	\$122,500.00		16-Apr-23	16-May-24	4.90%		\$122,500.00	
8	2023	MBS 3 yr.	\$250,000.00		16-May-23	15-May-26	4.60%		\$247,685.00	
10	2023	MBS 3 yr.	\$249,000.00		30-Jun-23	30-Jun-26	4.70%	\$1,955.84	\$249,000.00	
11	2023	MBS 3 yr.	\$250,000.00		27-Jul-23	27-Jul-26	4.75%	\$1,008.56	\$250,000.00	
12	2023	Mercantile 1 yr	\$250,000.00		31-Aug-23	30-Aug-24	5.05%		\$250,000.00	
14	2023	Dart 13 month	\$100,000.00		11-Aug-23	11-Sep-24	4.90%		\$100,000.00	
16	2023	MBS 5 yr.	\$250,000.00		27-Sep-23	27-Sep-28	5.00%		\$250,000.00	
GENERAL FUND TOTAL			\$5,109,456.06	\$1,822,821.68			62.23%	\$227,713.22	\$6,852,952.40	\$1,428,361.55
CEMETERY IMP.										
24	2001	MI-Class		\$49,000.00	1-Oct-07	PMMA	5.47%	\$4,898.14	\$4.32	
19	2021	MI-Class EDGE	\$25,000.00		23-Dec-21	PMMA	5.23%	\$1,380.80	\$26,305.53	25386.63
CEMETERY IMP. TOTAL				\$49,000.00				\$4,898.14	\$26,309.85	
CURRENT TAX										
24	2001	MI-Class		-\$6,151.51	Dec 2010	PMMA	5.47%	\$4,553.86	\$5,137.20	
CURRENT TAX TOTAL				-\$6,151.51				\$4,553.86	\$5,137.20	
SEWER RECEIVING FUND										
24	2001	MI-Class	\$115,000.00	\$1,740,492.48	1-Oct-07	PMMA	5.47%	\$118,636.45	\$824,128.93	
19	2021	MI-Class EDGE	\$900,000.00		23-Dec-21	PMMA	5.23%	\$47,849.41	\$946,998.65	\$913,918.05
2	2021	MBS 5 yr Gov Bond	\$250,000.00		28-Apr-21	28-Apr-26	1.00%	\$5,000.00	\$223,510.00	\$223,510.00
16	2021	CIBC 18 months	\$156,300.21		1-Nov-21	2-May-23	0.30%	\$712.47		
18	2021	MBS 5 yr	\$100,000.00		17-Dec-21	17-Dec-26	1.15%	\$1,723.43	\$87,661.00	\$87,661.00
7	2022	MBS 3 yr.	\$200,000.00		28-Sep-22	28-Mar-25	4.10%	\$6,807.12	\$197,894.00	\$197,894.00
8	2022	Mercantile 1 yr	\$100,000.00		8-Oct-22	8-Oct-23	2.01%		\$100,000.00	
10	2022	MBS 2 yr.	\$250,000.00		3-Oct-22	24-Sep-24	4.00%	\$7,506.85	\$247,442.50	\$247,442.50
14	2022	MBS 1 yr.	\$250,000.00		16-Dec-22	15-Dec-23	4.80%	\$6,971.88	\$250,415.00	\$250,415.00
5	2023	MBS 3 yr.	\$250,000.00		3-Apr-23	3-Apr-26	5.10%	\$4,261.66	\$250,000.00	
9	2023	CIBC 1 yr	\$156,300.21		2-May-23	1-May-24	4.90%		\$156,300.21	
13	2023	MBS 1 yr.	\$250,000.00		2-Aug-23	1-Aug-24	5.25%		\$250,000.00	
15	2023	MBS 1 yr.	\$250,000.00		13-Sep-23	12-Sep-24	5.60%		\$250,000.00	
SEWER REC TOTAL			\$3,227,600.42	\$1,740,492.48			13.15%	\$166,485.86	\$3,784,350.29	\$913,918.05
WATER FUND										
24	2001	MI-Class	\$237,776.20	\$365,245.73	3-Apr-06	PMMA	5.47%	\$51,704.44	\$463,726.37	
19	2021	MI-Class EDGE	\$316,000.00		23-Dec-21	PMMA	5.23%	\$16,800.43	\$332,501.73	\$320,886.77
1	2021	MBS 5 yr GOV BOND	\$200,000.00		21-Apr-21	21-Apr-26	0.90%	\$3,600.00	\$178,314.00	\$178,314.00
WATER FUND TOTAL			\$753,776.20	\$365,245.73			11.60%	\$68,504.87	\$974,542.10	\$320,886.77
T.I.R.F.										
24	2001	MI-Class	\$102,000.00	-\$105,857.87	21-May-01	PMMA	5.47%	\$26,498.61	\$12,640.74	
19	2021	MI-Class EDGE	\$10,000.00		23-Dec-21	PMMA	5.23%	\$531.67	\$10,522.23	\$10,154.66
13	2020	MBS 5yr	\$200,000.00		28-Jan-21	26-Jan-26	0.50%	\$3,190.76	\$176,618.00	\$176,618.00
T.I.R.F. TOTAL			\$312,000.00	-\$105,857.87			11.20%	\$30,221.04	\$199,780.97	
STOLL ROAD PAVING Bond paid in full 2021										
24	2001	MI-Class	\$528,136.10	-\$383,775.16	29-Nov-06	PMMA	5.47%	\$56,251.12	\$200,812.06	
STOLL RD PAVING TOTAL			\$528,136.10	-\$383,775.16				\$56,251.12	\$200,812.06	
STOLL RD WATER Bond paid in full 2021										
24	2001	MI-Class	\$410,483.63	-\$417,919.90	29-Nov-06	PMMA	5.47%	\$12,562.81	\$5,326.54	
STOLL RD WATER TOTAL			\$410,483.63	-\$417,919.90				\$12,562.81	\$5,326.54	
STOLL RD SEWER Bond paid in full 2021										
24	2001	MI-Class	\$1,942,691.91	-\$1,950,232.81	29-Nov-06	PMMA	5.47%	\$66,125.11	\$53,584.21	
STOLL RD SEWER TOTAL			\$1,942,691.91	-\$1,950,232.81				\$66,125.11	\$53,584.21	
WACOUSTA RD PAVING Bond paid in full 2021										
24	2001	MI-Class	\$50,848.01	-\$16,528.36	13-Apr-07	PMMA	5.47%	\$40,806.71	\$74,469.67	
WACOUSTA RD PAVING TOTAL			\$50,848.01	-\$16,528.36				\$40,806.71	\$74,469.67	
								\$12,177,265.29	Total of principal	

SUE BIERGANS, TREASURER
 PMMA - Pooled Money Market Account, liquid funds
 MMA - Money Market Account
 GOV BOND - United States Government Bonds, full faith and credit of US Government
 SEPTEMBER 2023

Financial Status Report

SEPTEMBER 2023

ACCOUNTS	BEGINNING BALANCE	FUNDS RECEIVED	FUNDS DISBURSED	ENDING BALANCE
GENERAL FUND				
CHECKING	\$ 13,065.36	\$ 554,289.46	\$ 556,793.59	\$ 10,561.23
SAVINGS ACCOUNT	\$ 2,029,616.60	\$ 72,613.40	\$ 740,857.63	\$ 1,361,372.37
INVESTMENTS	\$ 6,591,123.35	\$ 262,035.69		\$ 6,853,159.04
TOTAL	\$ 8,633,805.31	\$ 888,938.55	\$ 1,297,651.22	\$ 8,225,092.64
CEMETERY IMPROVEMENT FUND				
SAVINGS ACCOUNT	\$ 32,982.93	\$ 1,123.55	\$ 3,721.75	\$ 30,384.73
INVESTMENTS	\$ 26,223.60	\$ 86.25		\$ 26,309.85
TOTAL	\$ 59,206.53	\$ 1,209.80	\$ 3,721.75	\$ 56,694.58
TAX				
SAVINGS ACCOUNT	\$ 1,630,378.50	\$ 1,992,783.73	\$ 3,485,879.41	\$ 137,282.82
INVESTMENTS	\$ 5,114.13	\$ 23.07		\$ 5,137.20
TOTAL	\$ 1,635,492.63	\$ 1,992,806.80	\$ 3,485,879.41	\$ 142,420.02
TIRF				
SAVINGS ACCOUNT	\$ 72,294.19	\$ 229.96	\$ 72.58	\$ 72,451.57
INVESTMENTS	\$ 199,689.76	\$ 91.21		\$ 199,780.97
TOTAL	\$ 271,983.95	\$ 321.17	\$ 72.58	\$ 272,232.54
WATER DISTRICT #1				
SAVINGS ACCOUNT	\$ 98,021.92	\$ 196.85	\$ 233.93	\$ 97,984.84
INVESTMENTS	\$ 971,371.80	\$ 3,170.30		\$ 974,542.10
TOTAL	\$ 1,069,393.72	\$ 3,367.15	\$ 233.93	\$ 1,072,994.80
SEWER RECEIVING FUND				
SAVINGS ACCOUNT	\$ 376,548.56	\$ 388,651.52	\$ 288,521.07	\$ 476,679.01
INVESTMENTS	\$ 3,777,286.56	\$ 7,063.73		\$ 3,784,350.29
TOTAL	\$ 4,153,835.12	\$ 395,715.25	\$ 288,521.07	\$ 4,261,029.30
WACOUSTA RD PAVING				
INVESTMENTS	\$ 74,135.60	\$ 334.07	\$ -	\$ 74,469.67
TOTAL	\$ 74,135.60	\$ 334.07	\$ -	\$ 74,469.67
STOLL ROAD PAVING				
INVESTMENTS	\$ 199,911.27	\$ 900.79		\$ 200,812.06
TOTAL	\$ 199,911.27	\$ 900.79	\$ -	\$ 200,812.06
STOLL ROAD WATER				
INVESTMENTS	\$ 5,302.62	\$ 23.92		\$ 5,326.54
TOTAL	\$ 5,302.62	\$ 23.92	\$ -	\$ 5,326.54
STOLL ROAD SEWER				
INVESTMENTS	\$ 53,343.84	\$ 240.37		\$ 53,584.21
TOTAL	\$ 53,343.84	\$ 240.37	\$ -	\$ 53,584.21
GRAND TOTAL	\$ 16,156,410.59	\$ 3,283,857.87	\$ 5,076,079.96	\$ 14,364,656.36

Attachment 10

Township Manager's Report

Will be provided at the meeting on
Monday, October 16, 2023



Director's Report

September 19, 2023

Southern Clinton County Municipal Utilities Authority

Volume 16 Issue 9

Inside this issue:

Process—Making it Clean 2

Inspections—The Scoop on the Poop 2



Southern Clinton County Municipal Utilities Authority
"The Clean Water People"

3671 W. Herbison Rd.
DeWitt, MI 48820
517-669-8311
www.sccmua.com
www.facebook.com/sccmua

Maintenance—Keeping Things Humming

The maintenance crew were busy during and after the storm that impacted so many in the region. Our western front received the brunt of the storm's impact, knocking power out for nearly five days. During this time, the team monitored generators and fueled the portable generators daily. One generator did have a significant failure, although it failed in a way that it would continue to run just not transfer back to line power. The team had to manually transfer power back to the utility side and diagnose the problem. Again, as we are well accustomed to, a board failure was the culprit and unfortunately, the model is no longer supported, so a new transfer switch is the most economical fix.

Our crews also assisted the City this month when heavy rains caused excessive stormwater to flood a small area. They were able to get a plugged line opened and video the line to provide information to the City on appropriate further actions, if needed.

A new pump was installed at station 210 in Bath Twp, while the pump removed will be brought back to the shop and gone

through to evaluate if it will be a viable backup. The pump remaining in the station was inspected for wear and adjusted to factory specs to ensure efficiency.

Radio upgrades have continued in DeWitt Twp. This started a few years ago. By utilizing an unused frequency, we divided the system to allow for less radio traffic and increased data collection. The process continues this month with three more stations switched over. We work closely with a contractor to assist in the programming of these; however, our staff can build and install all components to save money and allow for an increase in capabilities.

A new chemical feed pump was installed at station 209 in Bath Twp. This will feed very small dosages downstream providing biological treatment for H2S reduction. This is still in the testing phase, but we hope this is a more cost-effective and traditional treatment operation while keeping biological activity viable.



Administration

A new operator started this month. Jesse Sotto comes to SCCMUA with a background in machine repair and tool and die work. Jesse has a young family and is looking for a lifelong career; we could not

be more excited to have him on our team.

Continued meetings working through project logistics and submittals have continued with no firm start date, but it will be soon.

The potential Bioworks partnership agreement is nearly ready to send to the D&P committee for review. Bioworks and SCCMUA have recently ramped up conversations to keep things moving forward.



PicMix

Process—Making it Clean

NPDES Permit: All permit requirements were met except ammonia. Total precipitation for the month was 4.03".

SCCMUA violated the daily Ammonia limit due to a surge of high flows caused by a rain event. The event produced a lot of rain in a short amount of time. Therefore, this caused the detention time through the RBCs to be shortened, resulting in an effluent ammonia result of 2.27 mg/l with a daily effluent limit of 2.00 mg/l.

SCCMUA staff had all hands on deck while repairing a broken, non-potable line between the old digester bldg. and the chlorine contact chamber. The team used the new Vactor truck to hydro-excavate down to the break's depth and the truck's pump-off feature to remove

water from the repair site. The repair was made by capping the pipe and rerouting to fulfill process needs.

Biotech Environmental is in the process of hauling biosolids. They are emptying both the north and south sludge storage tanks. Land application is taking place on a 100-acre field off Cutler Rd in DeWitt Twp; this is the second haul of the year.

RBC shaft repair is underway and moving along nicely. An air header in the 1st stage of the C2 train of the RBCs broke while under operation. Staff sprang into action, pumping the tank down for a thorough inspection of the break, cleaning the broken area of the pipe, and repairing it with a glued-in coupler.

The tank is filled and back in operation.

Staff are keeping up with scheduled maintenance and any pop-up maintenance items that may arise. Most recently, both main plant air compressors have been gone through and serviced, including fresh oil changes and the installation of new air filters for each. A unique rotating assembly was installed on our #1 effluent pump, which was completed due to a bearing failure in the previous rotating assembly. Staff will rebuild the rotating assembly they pulled out and place it on the shelf for future installation. Staff noticed a leak and completed a repair on the supply line that feeds the eyewash station in the ferric chloride room. A new feed valve controller was installed in our sulfur dioxide room as it had failed due to a power glitch issue during a previous storm. A new transducer was installed in our supernatant decant chamber.

Inspections—The Scoop on the Poop

Miss Dig Totals:

Miss Dig Requests: 496

Miss Digs Marked: 95

Inspection Services: 7

Projects:

Shadybrook phase III work continues. The contractor completed installation of the sanitary sewer. Air testing resulted in a section failure due to a defective gasket on a fitting in a lateral. The contractor was able to locate the defective fitting and replaced the fitting. The remainder of the testing will be completed in September.

Staff has completed drawdown tests at all the stations. Drawdown tests are another method to check the effectiveness of the pumps. Crews time how long it takes to fill and pump down a certain amount in the wet well, typically one foot. Each pump is tested three times and then averaged to get the best representation of the effectiveness of

the pump.

A new commercial building is under construction on Saginaw St in Bath Township. Public sewer was installed to the back of the lot for future buildings. All testing has been completed and passed. We are now waiting for record drawings to be completed.

Nottingham Fields development has finally moved ahead. After a long delay, the developer corrected all the deficiencies in the sanitary system. New homes should be breaking ground in the upcoming months.

The new mainline camera has arrived. Staff were able to remove all the old equipment from the camera van. The new camera is a great improvement over the old camera. The system takes up a quarter of the space of the old system. The camera is easier to lower and retrieve from a manhole and is easier to operate. The imagery is greatly improved. Staff looks forward to many years of service from the new system.



CLINTON COUNTY SHERIFF'S OFFICE

1347 E. Townsend Rd
St. Johns, MI 48879

SEAN DUSH
Sheriff

Phone (989) 224-5200
Fax (989) 224-1382

**TO: CLINTON COUNTY BOARD OF COMMISSIONERS,
TOWNSHIP SUPERVISORS AND VILLAGE MAYORS**

FROM: SEAN DUSH, SHERIFF

DATE: OCTOBER 4, 2023

SUBJECT: SEPTEMBER 2023 JAIL BILLING

The average daily population of inmates for the month of SEPTEMBER 2023 was 113 inmates. This total includes a daily average of 106 County Inmates and a daily average of 7 Inmates Housed for Other Jurisdictions.

Revenue for the month of SEPTEMBER 2023 was \$10,850.00

**MONTHLY JAIL COUNT
SEPTEMBER 2023**

DATE	MALE	FEMALE	TOTAL	BOARDER	CCSO
1	90	26	116	6	110
2	88	25	113	6	107
3	89	25	114	6	108
4	90	26	116	7	109
5	91	26	117	7	110
6	92	25	117	6	111
7	93	28	121	6	115
8	91	25	116	6	110
9	87	26	113	6	107
10	89	27	116	6	110
11	87	26	113	7	106
12	87	27	114	7	107
13	86	29	115	7	108
14	87	29	116	7	109
15	87	27	114	7	107
16	86	27	113	7	106
17	85	27	112	7	105
18	84	27	111	7	104
19	84	27	111	7	104
20	85	28	113	7	106
21	86	28	114	7	107
22	84	29	113	7	106
23	85	29	114	7	107
24	86	29	115	7	108
25	85	29	114	7	107
26	82	25	107	7	100
27	82	27	109	7	102
28	82	25	107	7	100
29	80	23	103	7	96
30	83	25	108	7	101
TOTALS	2593	802	3395	202	3193
DAILY AVERAGE	86	27	113	7	106

HOUSING TOTALS AND PAYMENTS RECEIVED 2023

JANUARY BILLING					
	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	62	2/1/2023	\$ 3,410.00	2/7/2023	\$ 3,410.00
CJRP - GROUP II	23	2/1/2023	\$ 920.00	2/7/2023	\$ 920.00
MDOC-DETAINEES	26	2/1/2023	\$ 910.00	2/6/2023	\$ 910.00
US FED MARSHALS - WEST	25	2/1/2023	\$ 1,200.00	2/8/2023	\$ 1,200.00
Totals	136		\$ 6,440.00		\$ 6,440.00
FEBRUARY BILLING					
	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	64	3/1/2023	\$ 3,520.00	3/7/2023	\$ 3,520.00
CJRP - GROUP II	15	3/8/2023	\$ 760.00	4/11/2023	\$ 760.00
MDOC-DETAINEES	16	3/1/2023	\$ 560.00	3/6/2023	\$ 560.00
US FED MARSHALS - WEST	1	3/1/2023	\$ 48.00	3/17/2023	\$ 48.00
Totals	96		\$ 4,888.00		\$ 4,888.00
MARCH BILLING					
	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	93	4/4/2023	\$ 5,115.00	4/12/2023	\$ 5,115.00
CJRP - GROUP II	114	4/4/2023	\$ 4,560.00	4/11/2023	\$ 4,560.00
MDOC-DETAINEES	3	4/5/2023	\$ 105.00	4/11/2023	\$ 105.00
US FED MARSHALS - WEST	0				
Totals	210		\$ 9,780.00		\$ 9,780.00
APRIL BILLING					
	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	90	5/2/2023	\$ 4,950.00	5/8/2023	\$ 4,950.00
CJRP - GROUP II	74	5/2/2023	\$ 2,960.00	5/8/2023	\$ 2,960.00
MDOC-DETAINEES	17	5/2/2023	\$ 595.00	5/5/2023	\$ 595.00
US FED MARSHALS - WEST	0				
Totals	181		\$ 8,505.00		\$ 8,505.00
MAY BILLING					
	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	90	6/6/2023	\$ 4,950.00	6/20/2023	\$ 4,950.00
CJRP - GROUP II	62	6/6/2023	\$ 2,480.00	6/20/2023	\$ 2,480.00
MDOC-DETAINEES	1	6/6/2023	\$ 35.00	6/12/2023	\$ 35.00
US FED MARSHALS - WEST	0				
Totals	153		\$ 7,465.00		\$ 7,465.00
JUNE BILLING					
	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	60	7/5/2023	\$ 3,300.00	7/12/2023	\$ 3,300.00
CJRP - GROUP II	60	7/5/2023	\$ 2,400.00	7/12/2023	\$ 2,400.00
CJRP - PRIS. PRESUMP.	26	7/5/2023	\$ 1,690.00	7/12/2023	\$ 1,690.00
MDOC-DETAINEES	31	7/5/2023	\$ 1,085.00	7/12/2023	\$ 1,085.00
Totals	177		\$ 8,475.00		\$ 8,475.00
JULY BILLING					
	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	62	8/1/2023	\$ 3,410.00	8/9/2023	\$ 3,410.00
CJRP - GROUP II	50	8/1/2023	\$ 2,000.00	8/9/2023	\$ 2,000.00
CJRP - PRIS. PRESUMP.	24	8/1/2023	\$ 1,560.00	8/9/2023	\$ 1,560.00
US FED MARSHALS - WEST					
Totals	136		\$ 6,970.00		\$ 6,970.00

AUGUST BILLING	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	108	9/8/2023	\$ 5,940.00	9/15/2023	\$ 5,940.00
CJRP - GROUP II	142	9/8/2023	\$ 5,680.00	9/15/2023	\$ 5,680.00
MDOC-DETAINEES	9	9/6/2023	\$ 315.00	9/14/2023	\$ 315.00
US FED MARSHALS - WEST					
Totals	259		\$ 11,935.00		\$ 11,935.00
SEPTEMBER BILLING	DAYS	DATE BILLED	AMOUNT BILLED	DATE RECEIVED	AMOUNT RECEIVED
CJRP - GROUP I	110	10/4/2023	\$ 6,050.00		
CJRP - GROUP II	120	10/4/2023	\$ 4,800.00		
MDOC-DETAINEES					
US FED MARSHALS - WEST					
Totals	230		\$ 10,850.00		\$ -

2023

**OUT OF COUNTY REVENUES
BILLED AND RECEIVED**

Month	Average Boarded Inmate	Average Local Inmate	Out County Revenues Billed	Out County Revenues Received
<i>January</i>	3	113	\$ 6,440.00	\$ 6,440.00
<i>February</i>	3	121	\$ 4,888.00	\$ 4,888.00
<i>March</i>	6	116	\$ 9,780.00	\$ 9,780.00
<i>April</i>	6	118	\$ 8,505.00	\$ 8,505.00
<i>May</i>	5	119	\$ 7,465.00	\$ 7,465.00
<i>June</i>	5	113	\$ 8,475.00	\$ 8,475.00
<i>July</i>	4	114	\$ 6,970.00	\$ 6,970.00
<i>August</i>	5	117	\$ 11,935.00	\$ 11,935.00
<i>September</i>	7	113	\$ 10,850.00	\$ -
<i>October</i>			\$ -	\$ -
<i>November</i>			\$ -	\$ -
<i>December</i>			\$ -	\$ -
Y-T-D	5	116	\$ 75,308.00	\$ 64,458.00
Captain Tom Wirth				

CLINTON COUNTY



SHERIFF'S OFFICE

MONTH: September of 2023

TRAFFIC CRASHES

	September 2023	YEAR TO DATE	2022
TOTALS			
Fatal Crashes	0	6	4
Deaths	0	9	4
Personal Injury	2	58	110
Property Damage Crash	33	378	531
Car/Deer	49	545	1,026
TOTAL	84	996	1,677

TRAFFIC ENFORCEMENT

	September 2023	YEAR TO DATE	2022
TOTALS			
OUIL	6	61	118
Seatbelt	1	23	34
Total Traffic Citations	332	3,467	5,117
VCSA(Drugs)	1	33	52

COMPLAINT ACTIVITY

	September 2023	YEAR TO DATE	2022
TOTALS			
Self-Initiated Calls	1,405	12,391	16,612
Calls for Service	566	5,362	7,812
Total Calls	1,974	17,779	2,4496
Written Reports	176	1,959	3,160

**SEPTEMBER 2023
TICKET TOTALS**

Township, City, Village	Handwritten Tickets	In Car Tickets	TOTAL TICKETS
BATH	0	2	2
BENGAL	0	22	22
BINGHAM	0	42	42
DALLAS	0	8	8
DEWITT	0	33	33
DUPLAIN	0	6	6
EAGLE	0	33	33
ESSEX	0	2	2
GREENBUSH	0	36	36
LEBANON	0	0	0
OLIVE	0	50	50
OVID	0	13	13
RILEY	0	11	11
VICTOR	1	8	9
WATERTOWN	0	62	62
WESTPHALIA	0	2	2
VILLAGE OF ELSIE	0	0	0
VILLAGE OF MAPLE RAPIDS	0	0	0
VILLAGE OF WESTPHALIA	0	0	0
VILLAGE OF FOWLER	0	0	0
CITY OF ST. JOHNS	0	0	0
CITY OF DEWITT	0	0	0
CITY OF OVID	0	1	1
SEPTEMBER TOTAL	1	331	332

COMMUNICATIONS

Number of Events by Nature

WATERTOWN TWP - 9/2023

Nature	# Events
9-1-1 HANG UP/OPEN LINE	5
ALARM	6
ANIMAL COMPLAINTS/BITES	11
ASSIST OTHER AGENCY	8
BE ON THE LOOKOUT	1
BREAKING & ENTERING	3
BUSINESS CONTACT/CHECK	7
CAR/DEER ACCIDENT	4
CHECK SUBJECT(S)	9
CHECK VEHICLE	3
CIVIL /NEIGHBOR DISPUTE	1
COMMUNITY POLICING	1
CRIMINAL SEXUAL CONDUCT	1
DOMESTIC SITUATION	1
FAMILY DISPUTE	2
FOLLOW UP	3
HARASSMENT AND THREATS	2
HIT AND RUN PDA	2
MEDICAL EXAMINER	1
MESSAGE DELIVERY	1
MISSING PERSON	1
MOTORIST ASSIST	5
NEGLECT CHILD/CHILD ABUSE	1
OPERATING WHILE INTOXICATED	1
PAPER SERVICE	3
PEACE OFFICER	1
PERSONAL INJURY ACCIDENT	2
PROPERTY CHECK	61
PROPERTY DAMAGE ACCIDENT	13

Nature	# Events
PSYCHIATRIC PERSON	3
PSYCHIATRIC PERSON 2	1
REPOSSESSED VEHICLE	1
REQUEST FOR SERVICE	4
SHOTS FIRED	1
SUSPICIOUS SITUATION	4
TRAFFIC ENFORCEMENT	1
TRAFFIC HAZARD	7
TRAFFIC STOP	68
TRESPASSING	2
UNKNOWN ACCIDENT	1
UNKNOWN TROUBLE	1
UNWANTED SUBJECT	1
VEHICLE IN DITCH	2
VIN INSPECTION	1
VIOL CONTROLLED SUBSTANCE ACT	1
WARRANT ARREST/PICKUP	2
WELFARE CHECK	5
Total	266



Clinton County Department of Waste Management
100 East State Street, Suite 1500, St. Johns, MI 48879
Phone: 989-224-5186, Fax: 989-224-5102

August 14, 2023

Clinton County Residential Recycling Options & Costs

Clinton County residents have many opportunities and options to recycle; each with their own unique challenges. This report explains how each program works and how each program is funded. The greatest barriers to providing a comprehensive and consistent recycling program to our residents are our lower population densities and restricted budgets. With that said, there has been enough interest from our residents that our local municipalities have felt it necessary to provide recycling services. A complete list can be found in Appendix A at the end of this report. This report will highlight each different program beginning with the two drop off recycling sites, which are funded in part by the Clinton County Department of Waste Management.

Rural Recycling Sites - Villages of Fowler and Maple Rapids

In 1992, four recycling drop off sites began with the help of a grant from the Michigan Department of Environmental Quality and the Clinton County Department of Waste Management. These programs began as once a month drop off but eventually evolved into a twenty-four hour, seven days a week recycling drop off sites. The County partnered with local municipalities to not only maintain these sites, but to offset the costs involved with contracting a hauler to handle the materials. Sadly, with a change in property ownership, the Eagle site closed in March 2012 and site owner's budget constraints pushed the closure of the Pewamo-Westphalia site in May 2014.

The two current recycling drop off sites are located in the Village of Fowler and the Village of Maple Rapids. Three of the current municipalities utilize Public Act 69 to charge their residents \$15 per household per year to subsidize the recycling program while the fourth municipality utilizes general fund money. Both sites are maintained by the local Department of Public Works employees. They are responsible for dealing with items that are placed in the wrong containers, trash left at the sites, snow and ice removal, general upkeep of location, contacting the contractor when a collection container is full and contacting the Department of Waste Management if there is an issue or problem. The Department of Waste Management promotes and markets the sites, manages all of the paperwork involved with contracting a recycling vendor, handles phones calls, emails & directs traffic to the sites, manages billing & invoices from the recycling contractor, tracks diversion information and reports annually to the local municipalities.

This program requires the collaboration of the two villages as well as Lebanon and Dallas townships to generate funding for the collection sites. Each fall, as part of the County's annual budget process, these municipalities are asked for their support for the next budget year and then the Board of Commissioners reviews the Recycling Service Plan. Once approved, it requires the participating municipalities contribute \$15 per household to the Rural Recycling Site program. Historical information can be found in Appendix B.

The Department of Waste Management not only oversees this program but contributes financially as seen in Table 1.

Table 1 - Rural Recycling Sites		
	2021	2022
Total Annual Charges for Fowler & MR	\$ 94,688.63	\$ 91,974.09
Total Annual Rebates for Recyclables	\$ (25,950.39)	\$ (23,175.90)
Community Share Contributions	\$ (21,000.00)	\$ (21,075.00)
Dept of Waste Management Responsibility	\$ (47,738.24)	\$ (47,723.19)
Difference in Expenses and (Revenues)	\$ -	\$ -
Tons Recycled at These Two Sites	384.58	345.28

St Johns Lions Club – St Johns

Established as a community service project by the St Johns Lions Club in the early 1990's, this permanent drop off recycling center partnered early on with the Department of Waste Management. This facility provides twenty-four hour access, five days a week (Monday through Friday) and is maintained by a core of volunteers and community service workers. The Lions Club employs just one part time person to help manage the operation. The Department of Waste Management provides funding to help support general recycling operations at the facility as well as funding to manage the collection of polystyrene. This is the only location within Clinton County that can accept polystyrene for recycling.

The Department of Waste Management not only provides funding for this facility but is also a contact. The department does marketing and promotion for this facility and answers phone calls & emails and directs traffic to this site. Even with their thrifty practices, operating a small material recovery facility such as this one requires more funding than what is available through commodity rebates. The St Johns Lions Club has received additional funding from Bingham, Bengal, Greenbush, Essex, Olive and Riley Townships. The revenues and expenditures are demonstrated in Table 2.

Table 2 - St Johns Lions Club		
	2021	2022
Total Expenses	\$ 62,955.88	\$ 73,579.03
Community Subsidies	\$ (5,500.00)	\$ (5,000.00)
Clinton County Dept of Waste Mngt Contributions	\$ (17,800.00)	\$ (17,800.00)
Total Annual Rebates for Recyclables	\$ (52,203.41)	\$ (37,794.47)
Other Revenues (rent, donations, etc)	\$ (24,015.98)	\$ (32,869.87)
Difference in Expenses and (Revenues)	\$ (36,563.51)	\$ (19,885.31)
Tons Recycled at This Site	273.58	276.30

Watertown Township – Wacousta

Watertown Township provides a recycling drop off site which mimics the County's Rural Recycling Sites. It is located at the township hall and accessible twenty-four hours a day, seven days a week. Granger provides this service free of charge to the township as part of their landfill host agreement. When asked for financials on maintaining this site, the township responded that they expend about \$11,000 per annum. As with other

sites, the recycling trucks have added wear and tear on the driveway and the township may be looking to address this additional expense in the future. Additional information can be found in Table 3.

Table 3 - Watertown Township		
	2021	2022
Expenses	\$ -	\$ -
Revenues	\$ -	\$ -
Tons Recycled at This Site	351.52	338.03

Village of Elsie – Cooperative agreement with Duplain and Fairfield Townships

The Village of Elsie works cooperatively with Duplain Township (Clinton County) and Fairfield Township (Shiawassee County) to provide a once a month recycling collection for their residents. This collection is held on the fourth full weekend of each month and is located within the Village of Elsie behind the fire department. The Village of Elsie manages the recycling contract and oversees the collection bins. Their contractor brings the recycling bins on the Friday before their specific weekend and removes the full bins on the following Monday. Additional information can be found in Table 4.

Table 4 - Village of Elsie		
	2021	2022
Expenses	\$ 3,120.00	\$ 3,120.00
Fairfield Township	\$ (500.00)	\$ (500.00)
Duplain Township	\$ (700.00)	\$ (700.00)
Village of Elsie	\$ (1,920.00)	\$ (1,920.00)
Difference in Expenses and (Revenues)	\$ -	\$ -
Tons Recycled at This Site	10.72	8.64

City of Ovid

The City of Ovid provided a permanent recycling drop off site for their residents. It was located across the street from City municipal building and accessible twenty-four hours a day, seven days a week. When asked for financials on employee costs to maintain the site, the City responded that there is little to no maintenance required at their site. The City of Ovid manages the recycling contract and emails their contractor whenever a collection bin becomes full. Ovid Township ended their partnership with this program at the end of 2016 and Middlebury Township (Shiawassee County) ended their partnership in 2020.

It is important to note that the City of Ovid closed their recycling site as of March 31, 2023 due to chronic contamination issues.

Additional information can be found in Table 5.

Table 5 - City of Ovid		
	2021	2022
Expenses	\$ 5,329.56	\$ 5,329.56
City of Ovid	\$ (5,329.56)	\$ (5,329.56)
Difference in Expenses and (Revenues)	\$ -	\$ -
Tons Recycled at This Site	60.43	60.41

Village of Westphalia – Cooperative agreement with Westphalia Township

As mentioned at the beginning of this report, these municipalities were once part of the Rural Recycling Site program. After budget constraints forced the closure of the permanent site in May of 2014, these municipalities opted to finance and manage a regular collection for their residents. This program began May 1, 2015 so the data listed below reflects those changes. This collection is held on the first full weekend & the third weekend of each month and is located within the Village of Westphalia behind the village office. The Village of Westphalia manages the recycling contract. Their contractor brings the recycling bins on the Friday before their specific weekend and removes the full bins on the following Monday. To date, their residents have done a good job of limiting contamination. Additional information can be found in Table 6.

Table 6 - Village of Westphalia		
	2021	2022
Total Annual Charges for Westphalia Site	\$ 7,560.00	\$ 8,444.19
Westphalia Township	\$ (3,780.00)	\$ (4,222.10)
Village of Westphalia	\$ (3,780.00)	\$ (4,222.10)
Difference in Expenses and (Revenues)	\$ -	\$ -
Tons Recycled at This Site	16.54	12.41

Greater Laingsburg Recyclers – Village of Laingsburg

Greater Laingsburg Recyclers (GLR) is a non-profit group of volunteers and local municipal partners who provide a regular drop off recycling collection for area residents. Donations are appreciated but not required. Revenue besides donations comes from business subscription service that provides 24/7 access to the center, sale of some materials. The total tons do not include batteries (recycled through the Department of Waste Management program through March of 2023) or glass (recycled through Michigan State University’s program), inkjets, egg cartons and reused items.

2022 was the first year in a permanent building, which increased accessibility and tonnage collected. The all-volunteer organization holds public drives four times a month. Fifteen local businesses signed up for unlimited access to the facility in 2022 and drop off their materials at their convenience. The GLR works to continue to expand acceptable items and local partnerships. In 2023, GLR began accepting dental products and denim.

Additional information can be found in Table 7.

Table 7 - Laingsburg Recyclers		
	2021	2022
Expenses	\$ 3,632.40	\$ 4,276.46
Revenue & Donations	\$ (5,030.01)	\$ (15,940.16)
Difference in Expenses and (Revenues)	\$ (1,397.61)	\$ (11,663.70)
Tons Recycled at This Site	13.4*	65.5

**Does not include December 2021 tonnage

Cities of DeWitt and St Johns

Both the City of DeWitt and the City of St Johns provide curbside recycling collection to their residents as part of their contracted trash hauling services.

The City of Dewitt offers bi-weekly curbside recycling collection in 96 gallon carts. The City of DeWitt holds a three year refuse and recycling contract with Granger and this contract is adjusted annually to allow up to a 3% increase in expenses. Residents are billed quarterly for this service and recycling costs the City approximately \$7 per household per month. The single hauler contract does separate out trash and recycling costs, so the information in Table 8 includes the cost for recycling services only. There are no

additional labor costs to the City other than the usual administration costs associated with billing, printing, etc.

In the City of St Johns, this weekly recycling curbside collection is paid by a .6000 millage on the summer taxes and a \$215 per dwelling unit charge. The millage and per unit charge cover both the weekly garbage and recycling services. This single hauler contract does not separate out trash and recycling costs, so the information in Table 9 includes the cost for both trash and recycling services. The City itself does not incur any additional personnel time in conjunction with the recycling program. The City of St Johns offers single stream, curbside, 96-gallon cart recyclable collection.

Additional information can be found in Tables 8 and 9.

Table 8 - City of DeWitt		
	July 1 , 2020-June 30, 2021	July 1 , 2021-June 30, 2022
Expenses (trash & recycling)	\$ 90,459.86	\$ 95,502.99
Residents billed quarterly	\$ (90,459.86)	\$ (90,502.99)
Difference in Expenses and (Revenues)	\$ -	\$ -
Tons Recycled through this program	279.00	279.29

Table 9 - City of St Johns		
	2021	2022
Expenses (trash & recycling)	\$ 325,890.00	\$ 335,488.00
Millage & Per Dwelling Fee	\$ (325,890.00)	\$ (335,488.00)
Difference in Expenses and (Revenues)	\$ -	\$ -
Tons Recycled through this program	488.00	392.25

City of East Lansing

The City of East Lansing provides area residents with a drop off recycling site. It is located at the Department of Public Works and accessible twenty-four hours a day, seven days a week. The City of East Lansing funds this drop off site through their Solid Waste Fund (which comes from property taxes), and, when available, material rebates. The City recently partnered with Recycle Coach to provide users more information regarding accepted material. Find the tool at [//CityofEastLansing.com/Recycle](http://CityofEastLansing.com/Recycle).

The drop off site is poised for grant-funded improvements in the upcoming year, including compactors to expand capacity and new educational resources for users. Table 10 provides additional information on this program.

Table 10 - City of East Lansing		
	2021	2022
Expenses	\$ 42,701.00	\$ 64,176.25
Total Annual Rebates for Recyclables	\$ (31,106.50)	\$ (15,854.36)
Solid Waste Fund	\$ (11,594.50)	\$ (48,321.89)
Difference in Expenses and (Revenues)	\$ -	\$ -
Tons Recycled through this program	317.00*	330.00

**The City of East Lansing provided updated information for 2021.*

DeWitt Township

Granger's Recycling Facility is located in DeWitt Township and accepts a number of recyclable items year-round, free of charge from all area residents. Granger's drop off recycling center is accessible twenty fours a day, seven days a week. More information is listed in Appendix A.

In closing, each municipality offers a unique recycling program based on the needs of their residents and availability of funding. A comparison of total costs for each site, tonnage collected and cost per ton per year can be found on the next page of this document. The Department of Waste Management is more than willing to work with any local municipality or non-profit to further the recycling efforts in Clinton County.

COST PER TON WORKSHEET

Table 1 - Rural Recycling Sites		
	2021	2022
Total Annual Charges for Fowler & MR	\$ 68,738.24	\$ 68,798.19
Tons Recycled at These Two Sites	384.58	345.28
Cost Per Ton	\$ 178.74	\$ 199.25

Table 2 - St Johns Lions Club		
	2021	2022
Total Expenses	\$ 62,955.88	\$ 73,579.00
Tons Recycled at This Site	273.58	276.30
Cost Per Ton	\$ 230.12	\$ 266.30

Table 3 - Watertown Township		
	2021	2022
Expenses	\$ -	\$ -
Tons Recycled at This Site	351.52	338.03
Cost Per Ton	\$ -	\$ -

Table 4 - Village of Elsie		
	2021	2022
Expenses	\$ 3,120.00	\$ 3,120.00
Tons Recycled at This Site	10.72	8.64
Cost Per Ton	\$ 291.04	\$ 361.11

Table 5 - City of Ovid		
	2021	2022
Expenses	\$ 5,329.56	\$ 5,329.56
Tons Recycled at This Site	60.43	60.41
Cost Per Ton	\$ 88.19	\$ 88.22

Table 6 - Village of Westphalia		
	2021	2022
Total Annual Charges for P/W Site	\$ 7,560.00	\$ 8,444.19
Tons Recycled at This Site	16.54	12.41
Cost Per Ton	\$ 457.07	\$ 680.43

CLINTON COUNTY RURAL RECYCLING SITES TOTAL MATERIAL RECYCLED & OPERATIONAL COSTS 1992-2022								
YEAR	EAGLE	MR	FOWLER	O/R	P/W	JAIL	TOTAL POUNDS	TOTAL COST
1992	32,043	35,927	47,095	20,994	62,848	11,806	210,713	\$24,181
1993	56,297	52,930	173,434	32,488	111,943	22,225	449,317	\$34,105
1994	54,092	51,744	181,154	28,596	124,402	20,622	460,610	\$30,915
1995	58,432	49,710	161,889	20,504	134,777	25,155	450,467	\$21,561
1996	75,063	50,613	170,756	27,998	124,877	14,303	463,610	\$36,756
1997	77,463	58,109	160,804	24,939	128,704	20,699	470,718	\$34,729
1998	90,288	85,185	170,796	14,591	133,308	16,212	515,160	\$29,663
1999	99,983	84,860	187,160	0	133,280	10,863	516,146	\$24,665
2000	156,460	140,370	236,310	0	207,330	37,610	778,080	\$40,267
2001	378,972	118,966	297,212	0	424,528	28,025	1,247,703	\$64,883
2002	290,251	84,324	223,316	0	298,622	21,078	917,591	\$62,725
2003	294,461	131,037	304,013	0	249,176	14,120	992,806	\$59,090
2004	317,230	145,260	251,951	0	222,580	14,900	951,921	\$56,482
2005	441,415	121,149	383,912	0	295,120	30,111	1,271,707	\$62,476
2006	496,654	148,620	320,347	0	294,690	30,660	1,290,971	\$57,181
2007	461,400	150,740	298,635	0	303,340	35,795	1,249,910	\$47,381
2008	499,300	162,370	354,630	0	331,290	37,950	1,385,540	\$56,917
2009	459,661	178,860	307,520	0	312,020	34,680	1,292,741	\$96,319
2010	510,280	221,240	318,280	0	338,000	29,639	1,417,439	\$76,053
2011	603,120	326,020	235,160	0	377,080	35,260	1,576,640	\$48,939
2012	162,300	309,220	218,200	0	400,080	26,362	1,116,162	\$50,891
2013	0	297,620	216,000	0	384,420	28,420	926,460	\$53,086
2014	0	241,200	426,440	0	193,680	29,860	891,180	\$50,365
2015	0	207,768	477,180	0	0	23,380	708,328	\$49,491
2016	0	208,480	459,820	0	0	11,956	680,256	\$45,914
2017	0	197,320	463,660	0	0	18,940	679,920	\$25,392
2018	0	244,240	499,320	0	0	24,600	768,160	\$44,749
2019	0	207,100	468,860	0	0	14,120	690,080	\$63,329
2020	0	228,140	538,800	0	0	11,820	778,760	\$74,086
2021	0	235,580	533,580	0	0	11,260	780,420	\$70,485
2022	0	191,440	499,120	0	0	14,320	704,880	\$70,737
TOTAL	5,615,165	4,966,142	9,585,354	170,110	5,586,095	706,751	26,629,616	\$ 1,563,812
							TONS RECYCLED	13,315

*Olive-Riley Site Closed - Support Lions Club

*Landfilled an additional 167,742 Pounds of Contamination

*Eagle Site Closed March 2012

*PW Site Closed May 2014

*Jail began recycling everything but cardboard through carts

*Total Cost AFTER Commodity Rebates

Where to Recycle in Clinton County

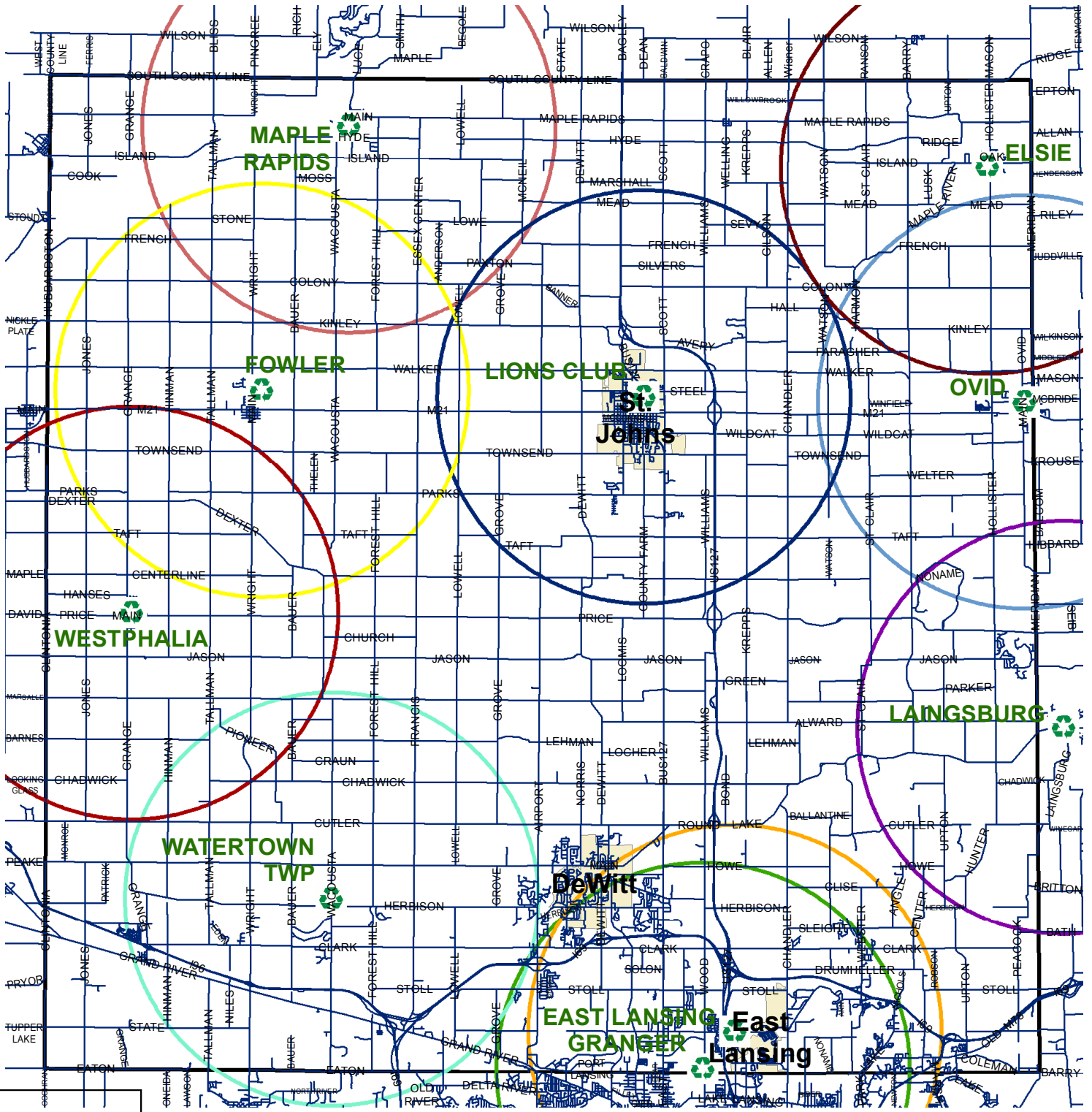
Revised March 2023

WHERE	WHEN	WHAT	WHO
DeWitt, City of	Weekly at curbside, on Wednesday. Apply for service at City Hall.	Metal Cans; Aluminum; #1 & #2 Plastic Bottles & Jugs; <i>No motor oil containers</i> ; ONP & Inserts; OMG; Mixed Paper; Brown Paper Bags; OCC; Boxboard. <i>NO plastic bags! Cell Phone & Ink cartridge recycling - accepted inside of Hall during normal business hours.</i>	DeWitt City Hall (517) 669-2441
Elsie 125 W. Main Street Behind Village Hall	4 th Full Weekend of each month – Elsie, Duplain & Fairfield Twp residents only	Metal Cans; #1 & #2 Plastic Bottles & Jugs; <i>Please remove all caps & lids, NO motor oil containers</i> ; ONP & Inserts; OMG; Mixed Household Papers; Brown Paper Bags OCC; Boxboard. <i>NO glass or plastic bags!</i>	Village of Elsie (989) 862-4273
E. Lansing (1) E. Lansing DPW Bldg. 1800 E. State Rd. (at Brown, east of Wood. (2) Residential weekly curbside service also available.	Self-serve Drop Off 24 Hours at DPW	Clear, Green & Brown Glass <i>bottles & jars only</i> ; Metal Cans; Aluminum; #1 & #2 Plastic Bottles & Jugs; <i>Please remove all caps & lids, No motor oil containers</i> ; ONP & Inserts; OMG; Mixed Paper; Phone Books; Brown Paper Bags; OCC; Boxboard. <i>Also accepting CFL light bulbs & rechargeable batteries in the DPW office, East Lansing City Hall & Hannah Community Center during normal business hours.</i>	City of E. Lansing DPW (517) 337-9459
Fowler Behind Fowler DPW, 10801 North Drive	Self-serve Drop Off 24 Hours	Glass <i>bottles & jars only</i> ; Metal Cans; Aluminum; #1 & #2 Plastic Bottles & Jugs; <i>Please remove all caps & lids, No motor oil containers, NO clamshells, NO plastic bags</i> ; ONP & Inserts - <i>Do not bundle</i> ; Phone Books; Office & Household Papers; Brown Paper Bags; OCC; Boxboard; OMG	Clinton County Dept. of Waste Mgt. (989) 224-5186 (888) 224-2450 (menu option 6, then 1)
Granger Recycling Center 16936 Wood Rd., just north of Lake Lansing Road. Driveway #4	Self-serve Drop Off 24 Hours	Clear & Brown Glass <i>bottles & jars only</i> ; Metal Cans; Aluminum; #1 & #2 Plastic Bottles & Jugs; <i>Please remove all caps & lids, No motor oil containers</i> ; ONP & Inserts; Brown Paper Bags; OMG & Glossy Catalogs; OCC; Boxboard; No wax coated boxes or cartons; <i>No Aerosols, plastic bags, foam, scrap metal, or bulky/rigid plastic.</i> www.grangernet.com/drop-off-recycling/	Granger Waste Services (517) 372-2800 www.grangernet.com
Greater Laingsburg Recyclers 7500 Woodbury Road Costs-\$3 donation, please	Drop Off 9am - 1pm Two Saturdays per month & 4pm – 6pm two Tuesdays per month (call for dates)	Glass <i>bottles & jars only</i> ; Metal Cans; Aluminum; Scrap Metal (no freon), Plastic Bottles, Jugs & Tubs sorted #1 #2 & #5; <i>Please remove all caps & lids, No motor oil containers, NO clamshells, NO plastic bags</i> ; ONP & inserts; Phonebooks; White & Colored Office Paper; OCC; Brown paper bags; OMG; Household Batteries; Computers & Electronics – <i>No monitors or televisions.</i>	Ellen or Terry Link (517) 651-2005 or Beth Lange (517) 651-6437
Maple Rapids Next to the Community Center 209 West Union Street	Self-serve Drop Off 24 Hours	Glass <i>bottles & jars only</i> ; Metal Cans; Aluminum; #1 & #2 Plastic Bottles & Jugs; <i>Please remove all caps & lids, No motor oil containers, NO clamshells, NO plastic bags</i> ; ONP & Inserts - <i>Do not bundle</i> ; Phone Books; Office & Household Papers; Brown Paper Bags; OCC; Boxboard; OMG	Clinton County Dept. of Waste Mgt. (989) 224-5186 (888) 224-2450 (menu option 6, then 1)
St. Johns, City of	Weekly at curbside: *North of M-21 and East of B.R. 127 pick up on Wednesday *Balance of City on Friday	Glass <i>bottles & jars only</i> ; Metal Cans; Plastic Bottles, Jugs, & Tubs #1, #2 & #5 <i>Please remove all caps & lids, No motor oil containers, NO clamshells, NO plastic bags</i> ; Mixed Papers; Junk Mail, ONP & Inserts; OCC; OMG; Phone Books; Catalogues; Brown Paper Bags.	City of St. Johns (989) 224-8944
St. Johns Lions Club Recycling Center 605 N Swegles Street Donations appreciated.	Self-serve Drop Off 24 Hours Monday to Friday ONLY – NO weekends	Metal Cans; Aluminum; HDPE #2 Plastic Bottles & Jugs - Must have seam on bottom and sides; <i>No motor oil containers or aerosol cans</i> ; PETE #1 – Bottles & jars such as mixed liquor, water/sport drinks, edible oil, etc.; PP #5-prescription bottles & yogurt cups; ONP & Inserts – <i>Do not put newspapers in plastic bags</i> ; OMG & Glossy Catalogs; Brown Paper Bags; OCC; Boxboard; Phone Books; Office & Household Papers; Polystyrene Foam #6 <i>foam only NO peanuts, NO insulation sheets.</i>	Mike with SJLCRC (517) 202-5438
Watertown Township Township Hall 12803 S. Wacousta Rd.	Self-serve Drop Off 24 Hours	Glass <i>bottles & jars only</i> ; Metal Cans; Aluminum; #1 & #2 Plastic Bottles & Jugs; <i>Please remove all caps & lids, No motor oil containers, NO clamshells, NO plastic bags</i> ; OMG & Catalogs; ONP & Inserts; Brown Paper Bags; OCC; <i>NO Phonebooks. Batteries & cell phones may be dropped off inside the hall during normal business hours. Will exchange mercury health thermometer for digital.</i>	Watertown Township (517) 626-6593
Westphalia Village Behind the Village Hall 200 North Willow Street	First Full Weekend & Third Weekend of Each Month Saturday - Monday	Metal Cans; #1 & #2 Plastic Bottles & Jugs; <i>Please remove all caps & lids, NO motor oil containers, NO Clamshells, NO plastic bags, NO foam</i> ; ONP & Inserts; OMG; Mixed Household Papers; Brown Paper Bags OCC; Boxboard. <i>NO glass or plastic bags!</i>	Village of Westphalia (989) 587-4434

Material Codes: ONP = Old Newspaper, OCC = Old Corrugated Cardboard, OMG = Old Magazines

Call your trash hauler if you are interested in subscription curbside recycling services.

CLINTON COUNTY RECYCLING



Legend

Recycling Sites

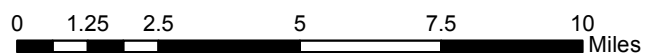
Streets

NAMES

- EAST LANSING
- ELSIE
- FOWLER
- GRANGER
- LAINGSBURG
- LIONS CLUB
- MAPLE RAPIDS
- OVID
- WATERTOWN TWP
- WESTPHALIA

County
 County
 Cities With Curbside Recycling

1 in = 3 miles



CLINTON COUNTY TOWNSHIP OFFICERS' ASSOCIATION

PRESIDENT: CLAUDIA BARRETT PLUGER
VICE PRESIDENT: CAROLYN BROKOB
SECRETARY: MARIE E. HOWE

TRUSTEES: STARR WIRTH
RAMONA SMITH
DAVID SEEGER

PROPOSED MINUTES OF THE CLINTON COUNTY TOWNSHIP OFFICERS' ASSOCIATION (CCTOA) MEETING OF TUESDAY APRIL 25, 2023 CLINTON COUNTY TRANSIT SYSTEMS, ST. JOHNS

The CCTOA was called to order by President Claudia Pluger at 7:00 pm

Roll Call of Member Townships:

Roll Call:

Bath, Eagle, Riley, Victor, Bingham, Greenbush, Watertown, Lebanon, DeWitt, Olive, and Ovid.

Board Members – All Present

President Pluger stated a quorum was present.

Also, in attendance from the sign-in sheet:

Trish Martens, Don Potts and Brian Lawless, **Riley**; Kevin Garvey, **Riley/Dewitt**; David Seeger, Adam Cramton, and Sandy Stump, **Dewitt**; Dennis Strahle and Starr Wirth, **Eagle**; Dan Smith, Greg Armbrustmacher, **Lebanon**; Phil Hanes, **Drain Commissioner**; Eric Voisinet, **Olive**; Arlene Pesik, **Ovid**; Julie Townsend; **Victor**; Doug Steffen and Mike Frederick, **Clinton County Road Commission**; Gail Watkins, Lisa Grysen, Jody Smith and Jack Phillips, **Clinton Area Transit System (CATS)**; Ramona Smith, **Greenbush**; Dan Skorich, **Blue Bus**; Carolyn Brokob, **Watertown**.

APPROVAL OF AGENDA: April 25, 2023

APPROVAL OF MINUTES: 22 November 2022
17 January 2023

Gail Watkins requested a few minutes to address the Township Officials. A welcome was extended to all for attending this meeting in their new CATS building. He further continued stating there are now 45 dedicated employees with about **one** million miles driven at this time. He introduced Board Members Lisa Grysen, Jody Smith and Jack Phillips along with the Executive Director, MaLissa Schutt, including employees who stayed for this meeting.

NEW BUSINESS:

Trish Martens regarding CCTOA By-Laws / Review

Dave Seeger, Patti Schafer, Jessi Chant-Smith stated rules had not been reviewed since 2018. Motion passed to create a committee to review the By-Laws.

REPORTS AND UPDATES:

Sherriff Sean Dush: Clinton County Sherriff Department –absent

Phillip Hanes: Clinton County Drain Commissioner:

Like others, Covid 19 has been a problem. There are five (5) new employees and everyone is learning their new positions. This year the program for spraying has been slower than usual. He also wanted to remind people about committee participation and how important this is to government.

Kate Neese: Recycling and Waste Management: – absent

David Pohl: Clinton County Board of Commissioners:

Because of the success, there will be another Clean Community event at Motz Park. Looking to another park in the fall. The County Assessment was up 5%. The Commissioners approved “body cams and new scanners” for the Sheriff’s Department and they are working great! The Commissioners are also involved with the assessment process to help with improvements such as review of the Prosecutor’s Office regarding staffing. The office of Veteran Affairs is working with Ingham County and setting up meetings twice a week in the Clinton County office. As stated before, their telephone number is 517-887-4392. On another issue, Opioid Funds are about \$900,000 for those 18 and over. If these services are needed, contact one of us.

Ramona Smith – Greenbush Twp. Asked why Motz Park?

Answer: People need to know more about their park and its location within the county. This works well for attendance because people like the park.

MaLissa Schutt: Executive Director Watkins Center:

I am very excited to have everyone here at our new Gail Watkins Center. There are lots of changes being made. As you heard earlier, the Center is growing very fast. To date, we are 46% ahead of our pre-covid numbers. Our main goal is to engage with our community. Scheduling has become a priority for us.

Patti Schafer: Michigan Township Association Director:

Discussed the MTA Conference with 1,100 attendees and 100 vendors. Looking forward to the Grand Traverse event being held April 22-25, 2024. Remember MTA has a sign up for online classes after conferences. Just a note; check to see if your clerk has requirements needed from Proposal 22-2. MTA believes this may appear to be an unfunded mandate. If there are any ideas or concerns contact MTA. We are also working on other important issues to townships – one example would be, short term rentals. We understand Deb Sutherland, Clinton County Clerk, is looking for people to help with the new nine (9) days early voting.

Doug Steffen – Clinton County Road Commission:

Paving has started on Grand River along with the “chip seal” process on the County Roads. Looking towards winter maintenance. Moving into CCRC new building in July. The second application for “chloride application” on gravel roads is coming up.

OTHER REPORTS:

Adam Smitty: Guidehouse-Broadband

Adam submitted an email on April 25, 2023 because he was unable to attend this meeting. Here is just a few of his comments: Total Project Cost: \$27,746,086.21.

Broken down – Labor \$ 22.5 M; Material \$ 4.7 M; Permits and Services \$500K. Total Grant Funding Requested; \$ 16,370,190.87. Frontier Match: 8.9M; Clinton County Match 2.4M. Locations Proposed: 3,604

ADDITIONAL REPORTS:

None at this time

BOARD COMMENTS:

Looking for speakers---suggestions were discussed – State Legislators, MTA, MSU experts, etc....

ADJOURNMENT:

Unanimous vote to adjourn at 7:52 p.m.

MEETING SCHEDULE:

Last meeting dates and locations:

Tuesday September 19, 2023 – Riley Township

And

Tuesday November 21, 2023 – Clinton County Road Commission

Respectfully Submitted,

Marie E. Howe, Secretary
Clinton County Township Officers' Association

Watertown Charter Township
September 18, 2023, Board of Trustees Regular Meeting Minutes - DRAFT

1. **CALL TO ORDER:** The meeting was called to order at 7:00PM by Supervisor Maahs with the Pledge of Allegiance to the Flag of the United States of America.

BOARD MEMBERS PRESENT: Supervisor John Maahs, Treasurer Sue Biergans, Clerk Carolyn Brokob, Trustee Chad Cooley, Trustee Todd Hufnagel, Trustee Holly Madill, and Trustee Ron Overton.

BOARD MEMBERS ABSENT: None.

STAFF PRESENT: Township Manager Jennifer Tubbs and Township Planning Director Andrea Polverento.

PUBLIC PRESENT: Deputy Matt Dedyne, Peg McCleod, Peter Psarouthakis, Frances McNamara, Susan Hunter, and Ken Mitchell.

2. **PUBLIC COMMENT:**

Deputy DeDyne provided an update from the Clinton County Sheriff's Department. The Deputy suggested residents use the Smart 9-1-1 cell phone app to get automatic alerts.

Ken Mitchell, County Commissioner provided an update. Commissioner Mitchell will follow up on information that was recently distributed on the proposed Clinton County off-road vehicle ordinance as Watertown Charter Township did not receive the mailing.

Resident Peg McLeod shared concerns about off-road vehicles near her residence and is interested in reviewing the draft. Mrs. McLeod also felt that Clinton County should have received emergency funding to assist with the August storm damage.

3. **CONSENT AGENDA:**

Addition to correspondence – Assessment Audit Results (3a iiiii).

Motion by Trustee Madill, seconded by Trustee Cooley, to approve the consent agenda as amended. Motion carried unanimously.

4. **AGENDA APPROVAL:**

Motion by Trustee Cooley, seconded by Trustee Hufnagel, to approve the agenda as presented. Motion carried unanimously.

5. **APPROVAL OF MINUTES: August 21, 2023 – Regular Meeting**

Motion by Clerk Brokob, seconded by Treasurer Biergans, to approve the regular meeting minutes of August 21, 2023. Motion carried unanimously.

6. **APPROVAL OF BILLS:**

Motion by Treasurer Biergans, seconded by Trustee Madill, to approve the additional bill list on the table dated September 18, 2023. Motion carried unanimously.

Watertown Charter Township
September 18, 2023, Board of Trustees Regular Meeting Minutes - DRAFT

7. **PUBLIC HEARING:** None

8. **PENDING BUSINESS:** None

9. **NEW BUSINESS:**

a. Resolution 9-18-2023-1: Bank Depository

Treasurer Biergans stated that the Bank Depository resolution was updated with the recent change to Mercantile Bank.

Motion by Trustee Overton, seconded by Trustee Madill, to waive the reading of resolution 9-18-2023-1. Motion carried unanimously.

Motion by Treasurer Biergans, seconded by Trustee Madill, to adopt resolution 9-18-2023-1 Bank Depository as presented.

Roll Call Vote: Those voting AYE were Brokob, Maahs, Madill, Overton, Cooley, Hufnagel, Biergans. Seven AYES, zero NAYS. Motion carried unanimously.

b. Resolution 9-18-2023-2: Bank Signature Authority

Treasurer Biergans stated that the Bank Signature Authority resolution also required a change with the change to Mercantile Bank.

Motion by Treasurer Biergans, seconded by Trustee Madill, to waive the reading of resolution 9-18-2023-2. Motion carried unanimously.

Motion by Treasurer Biergans, seconded by Trustee Madill, to adopt resolution 9-18-2023-2 Bank Signature Authority as presented.

Roll Call Vote: Those voting AYE were Overton, Maahs, Biergans, Madill, Brokob, Cooley, Hufnagel. Seven AYES, zero NAYS. Motion carried unanimously.

c. Resolution 9-18-2023-3: Tri-County Hazard Mitigation Plan

Clerk Brokob stated that an approved hazard mitigation plan makes the Tri-County Region and its communities eligible for a variety of federal hazard mitigation grant programs and opportunities. Watertown Charter Township is considered a participating jurisdiction.

Motion by Trustee Cooley, seconded by Trustee Hufnagel, to waive the reading of resolution 9-18-2023-3. Motion carried unanimously.

Motion by Trustee Cooley, seconded by Trustee Hufnagel, to adopt resolution 9-18-2023-3 Tri-County Hazard Mitigation Plan-2023 update.

Roll Call Vote: Those voting AYE were Hufnagel, Overton, Maahs, Cooley, Biergans, Madill, Brokob. Seven AYES, zero NAYS. Motion carried unanimously.

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d. Resolution 9-18-2023-4: Amendment to Clinton County Solid Waste Management Plan

Granger Landfill has requested two amendments to the County's Part 115 Solid Waste Management Plan. 1) Change the total area sited for use at the Grand River Avenue Landfill, to include the closed, but licensed 60-acre portion of the landfill (within the current boundaries). 2) Addition of Branch County to the solid waste import/export list for Clinton County. Clerk Brokob serves on the Clinton County Solid Waste Planning Committee (SWPC) and said that over the past year, the SWPC worked with Granger and the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to answer questions and hold public outreach and a hearing. The SWPC voted to recommend the amendments to the Clinton County Board of Commissioners and Part 115 requires approval from 67% of the municipalities in Clinton County.

Motion by Trustee Madill, seconded by Trustee Cooley, to waive the reading of resolution 9-18-2023-4. Motion carried unanimously.

Motion by Trustee Madill, seconded by Clerk Brokob, to adopt resolution 9-18-2023-4 Amendment to Clinton County Solid Waste Management Plan.

Roll Call Vote: Those voting AYE were Biergans, Maahs, Hufnagel, Overton, Cooley, Brokob, Madill. Seven AYES, zero NAYS. Motion carried unanimously.

e. Final Reading of Ordinance 58 – Revisions to Cemetery Ordinance

One change was noted on Ordinance 58 in section 8.4 (#3). With recent removal of the cemetery fund, the statement should read "deposited in the *general* fund." The ordinance will take effect seven days after publication.

Motion by Clerk Brokob, seconded by Trustee Cooley, to waive the final reading of Ordinance No. 58. Motion carried unanimously.

Motion by Clerk Brokob, seconded by Treasurer Biergans, to adopt Watertown Charter Township Ordinance No. 58, amending Chapter 8-Cemeteries.

Roll Call Vote: Those voting AYE were Maahs, Brokob, Biergans, Madill, Overton, Cooley, Hufnagel. Seven AYES, zero NAYS. Motion carried unanimously.

f. 2024-2025 Compensation Commission Resolution/Recommendation

Motion by Trustee Overton, seconded by Trustee Cooley, to accept and place on file the Compensation Commission Resolution to Establish Township Officer Salaries for the Years of 2025 and 2026. Motion carried unanimously.

g. Policy ad hoc Committee Update

A revised cover memo was distributed by Manager Tubbs regarding the summary of changes in the Employment Policies and the Board Policies.

Motion by Clerk Brokob, seconded by Trustee Hufnagel, to approve the revisions to the Watertown Charter Township Board Policies and the Employment Policies with an effective date of November 1, 2023. Motion carried unanimously.

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h. Fee Schedule Changes

Motion by Trustee Overton, seconded by Clerk Brokob, to adopt the revised township fee schedule as presented, with an effective date of October 1, 2023. Motion carried unanimously.

i. Closed Session pursuant to MCL 15.268-Discuss Purchase of Real Property

Motion by Trustee Overton, seconded by Trustee Hufnagel, to meet in closed session under section 8 of the Open Meetings Act, to discuss the purchase of real property and requested to have the Township Manager present.

Roll Call Vote: Those voting AYE were Madill, Maahs, Cooley, Brokob, Biergans, Hufnagel, Overton. Seven AYES, zero NAYS. Motion carried unanimously.

Closed session commenced at 8:10PM and the board exited closed session at 8:43PM

10. BOARD MEMBER AND PUBLIC COMMENT:

Clerk Brokob stated that the Election Commission met today and adopted the resolution to collaborate with Clinton County on early voting. All township residents can use either of the Early Voting Centers (EVC) located in DeWitt Charter Township or Bingham Township. Clerks and workers from each municipality in the county will staff the sites for all nine days of early voting for every state or federal election.

Resident Peter Psarouthakis serves on the Clinton County Planning Commission and stated that the Eagle Township Giffels Webster Comprehensive Plan Summary Report was received and placed on file with no further action at this time. Eagle Township Planning Commission voted to ask the County Planning Commission to do nothing with the report.

Planning Director Andrea Polverento stated that the Watertown Charter Township Planning Commission has received the final draft of the master plan. It is currently in the 63-day review period. Director Polverento said the master plan is expected to come to the Board of Trustees at the December meeting.

Township Manager Jennifer Tubbs reminded the staff that October 2, 2023, is the special budget meeting. She had copies available of the 2024 draft budget for trustees. Complaints have been received from residents on Clark Road during the ditch and berm maintenance. Since Riverside and Looking Glass Brook have been fog sealed she has not received any complaints.

11. ADJOURNMENT: 8:44PM

Date approved:

John Maahs, Supervisor

Carolyn Brokob, Clerk

**CLOSED SESSION MEETING MINUTES FROM
SEPTEMBER 18, 2023
WILL BE SHARED CONFIDENTIALY WITH THE
BOARD OF TRUSTEES FOR APPROVAL**

Watertown Charter Township

12803 S. Wacousta Road, Grand Ledge MI 48837 | (517) 626-6593

October 2, 2023, Board of Trustees Special Meeting Minutes

- 1) **CALL TO ORDER:** The meeting was called to order at 7:01PM by Supervisor John Maahs with the Pledge of Allegiance.

BOARD MEMBERS PRESENT: Supervisor John Maahs, Clerk Carolyn Brokob, Trustee Chad Cooley, Trustee Todd Hufnagel, Trustee Holly Madill, and Trustee Ron Overton (6:04PM).

BOARD MEMBERS ABSENT: Treasurer Sue Biergans, with notice.

STAFF PRESENT: Township Manager Jennifer Tubbs and Planning Director Andrea Polverento.

- 2) **PUBLIC COMMENT:**

None.

- 3) **AGENDA APPROVAL:**

Motion by Trustee Hufnagel, seconded by Trustee Madill, to approve the agenda as presented. Motion carried unanimously.

- 4) **NEW BUSINESS:**

a) Work Session – Proposed 2024 Budget

The board reviewed and discussed the proposed 2024 township budget as presented by the township manager. The board determined that no additional work sessions were necessary.

- 5) **BOARD MEMBER AND PUBLIC COMMENT:**

None

- 6) **ADJOURNMENT:** Moved by consensus to adjourn at 7:01PM.

**WATERTOWN CHARTER TOWNSHIP
CLINTON COUNTY, MICHIGAN**

**RESOLUTION OPPOSING ANY LEGISLATION PREEMPTING LOCAL CONTROL FOR
SITING AND PERMITTING OF UTILITY-SCALE RENEWABLE FACILITIES**

WHEREAS, Executive Directive 2020-10 aims to achieve 100% carbon neutrality in Michigan by 2050; and

WHEREAS, to meet the energy goals and to expand renewable energy projects in Michigan, Governor Whitmer has proposed the Michigan Public Service Commission be the sole authority for the siting and permitting of utility-scale renewable projects, allowing these projects to be expedited; and

WHEREAS, the governor has proposed the Michigan Public Service Commission be the sole regulating authority for solar and wind projects to expedite these efforts; and

WHEREAS, by transferring this sole authority to the Michigan Public Service Commission, local authority will be preempted; and

WHEREAS, a township would be unable to determine the number, location, size, setback requirements, site plan approval, fire protection and emergency plan, volume levels, construction traffic routes, decommissioning plan or any other criteria for such solar, wind or large-scale battery facilities; and

WHEREAS, a township ordinance, rule, policy or requirement currently in place for solar, wind and large-scale solar facilities would be null and void; and

WHEREAS, all other energy facilities regulated by Michigan Public Service Commission must adhere to local zoning requirements; and

WHEREAS, if a township already has a solar or wind policy, practice, regulation, rule, or ordinance on record it would be null and void; and

WHEREAS, The Charter Township of Watertown Master Plan recognizes the importance of renewable energy projects; and the zoning ordinance includes regulations for renewable energy projects; and

WHEREAS, The Michigan Townships Association opposes legislation that eliminates local government authority on the siting and permitting of said facilities that will be located in those communities for 20-50 years.

THEREFORE, BE IT RESOLVED that Watertown Charter Township Board of Trustees opposes legislation that would preempt local control in the siting and permitting of large-scale renewable energy facilities including solar, wind and large-scale battery storage facilities.

GROUNDWATER QUALITY REPORT FOR WATERTOWN CHARTER TOWNSHIP SPECIAL PROJECT

2023

Project Description

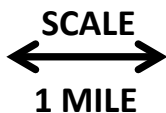
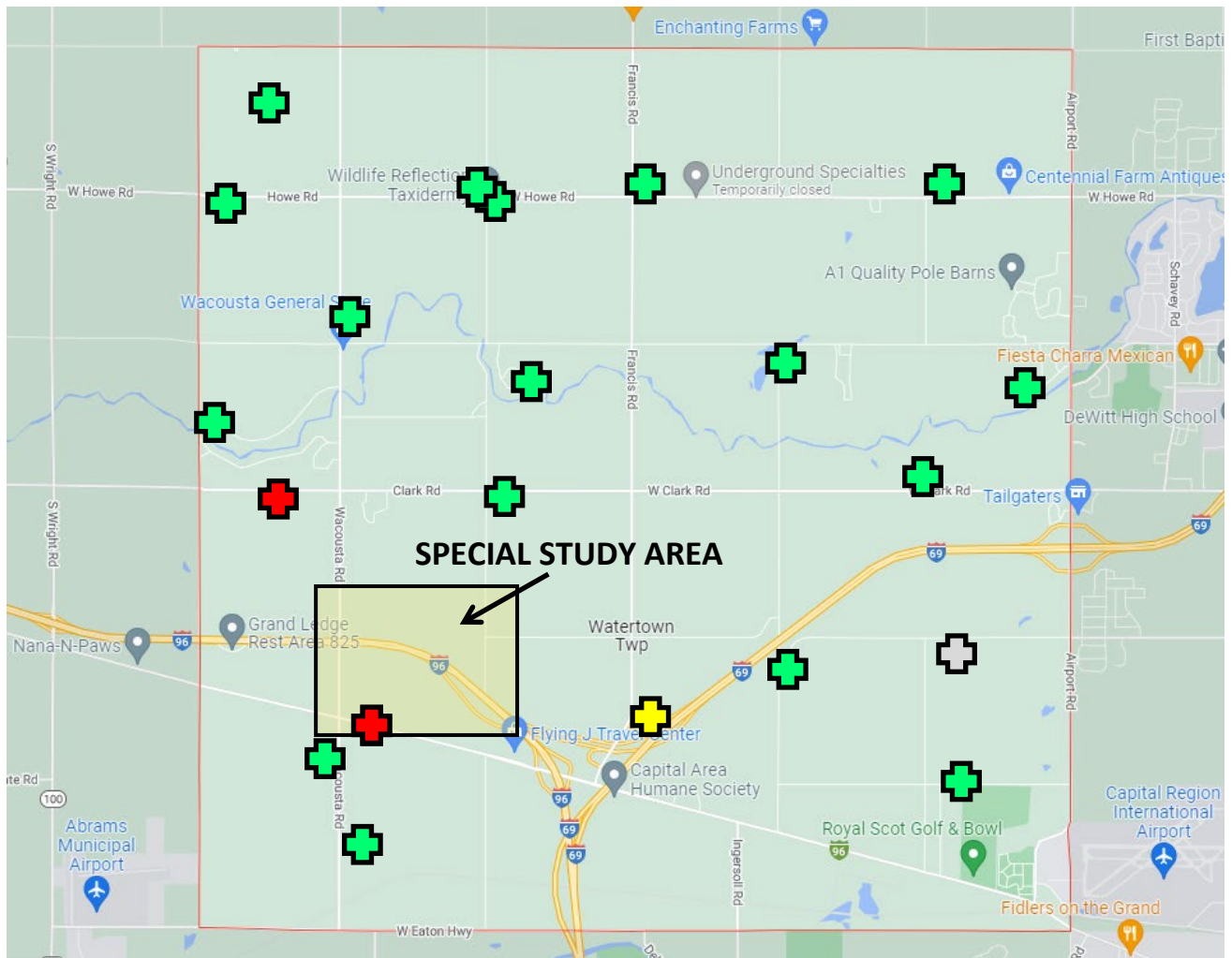
The major aquifer systems in Watertown Township, Clinton County Michigan, are made up of the Saginaw, Grand River, and Red Beds bedrock formations. A majority of people in Watertown Township obtain their water from wells which are completed in the Pennsylvanian-age Saginaw bedrock groundwater aquifer. Stratigraphically, the Saginaw is the oldest formation and overlain by the Grand River formation, and then the Red Beds. The Saginaw and Grand River formations form a continuous aquifer unit in the Township. The Jurassic age Red Beds formations, which consist of primarily clay, shale, and gypsum, acts as a confining layer. The Red Beds layer is not continuous across the Township but covers a large area.





In 2022 a groundwater survey was completed in Watertown Charter Township to help establish a baseline of water quality information for the area. Delta Township was also sampled in 2022, along with Windsor Township in 2023. Both DeWitt and Bath Townships were sampled in 2021. All of Ingham County was sampled from 2015 to 2020. The information collected from these surveys should be useful for water quality information and groundwater management.

The 2022 groundwater survey in Watertown Township indicated several wells with average groundwater chemistry results. One well did have an above average chloride level that was probably caused by road salt or water softener waste water discharge. One well did have an above average level for boron. Two wells had levels of arsenic at or above the EPA drinking water standard for arsenic, which is currently 10.0 ppb. Of the two wells, one had a result of 10.0 ppb. The other well had a level of arsenic at 22.0 ppb, which is significantly higher than other wells in the Township area. To further determine the extent of this level of arsenic in the groundwater, and to also ascertain groundwater chemistry in this area of the Township, a special project was conducted to sample several other wells in this smaller area.

This smaller area of the Township is characterized by having an active landfill site operated by the Granger Waste Services, and a major set of roads which includes Interstate I-96, West Grand River Highway and Wacousta road. The location of this special study area can be seen on Fig. 1, a map showing well locations from the 2022 survey.

Figure 1 WATERTOWN CHARTER TOWNSHIP WELL SAMPLING SITES

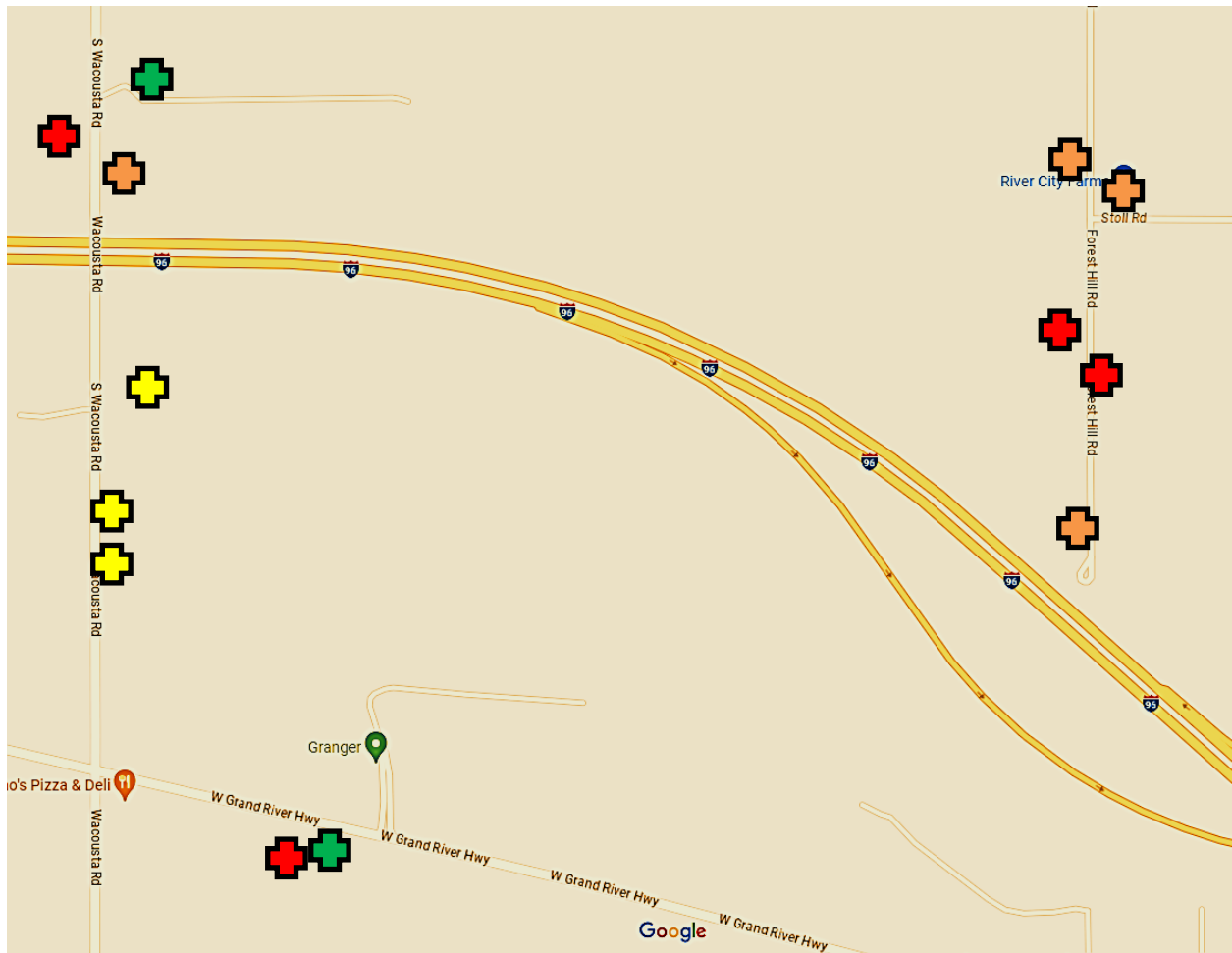


-  **AVERAGE WATER CHEMISTRY**
-  **ABOVE AVERAGE CHLORIDE LEVELS**
-  **ABOVE AVERAGE BORON LEVELS**
-  **ARSENIC LEVELS AT OR ABOVE EPA DRINKING WATER STANDARD OF 10 PPB**





Several letters were sent out from the Township to homeowners in the special study area. A total of 11 homes and one business were willing to participate in the water well sampling. Each water well owner was sent a copy of their water test results along with some educational material on the test results. The educational material was important to

share with homeowners to help them better understand how their water well system works. It was determined from past surveys that homeowners lack a basic understanding about water well systems and how to properly maintain them.

Figure 2 WELL TESTING SITES IN SPECIAL STUDY AREA



SCALE
1/4 MILE

-  **AVERAGE WATER CHEMISTRY**
-  **ABOVE AVERAGE CHLORIDE LEVELS**
-  **ARSENIC LEVELS AT OR ABOVE EPA DRINKING WATER STANDARD OF 10 PPB**
-  **ARSENIC LEVELS AT OR ABOVE EPA DRINKING WATER STANDARD OF 10 PPB AND CHLORIDE ABOVE AVERAGE LEVELS**

Results of the Special Survey

A total of 12 wells were sampled for this study. Coliform Bacteria presence was tested and found in one of the wells. E. Coli bacteria was not present in any of the wells. Various water chemistry parameters were tested to assess the groundwater quality. Average mean values of the *primary parameters* tested were calculated.

Table 1: Mean values of the *primary* water chemistry data with a comparison of the first Watertown Township survey data to the Special Area survey data. All mean values are shown in parts per million (ppm) except pH and conductivity, which is shown in units of micro-Siemens per centimeter. A red *P Value* indicates a statistical significant difference between the mean values.

PARAMETER	WATERTOWN (mean)	SPECIAL AREA (mean)	MANN-WHITNEY Z	P VALUE
ALKALINITY	359.7	392.5	-2.65711	.00782
ARSENIC	0.003	0.013	-3.96695	.00008
BORON	0.185	0.022	2.84423	.00452
CALCIUM	81.2	111.0	-3.87339	.0001
CHLORIDE	7.27	33.50	-2.84423	.00452
CONDUCTIVITY	638	765	-2.78809	.00528
HARDNESS	326.9	437.1	-4.0418	<.00001
IRON	1.34	2.63	-2.69453	.00714
MAGNESIUM	30.1	38.8	-3.63013	.00028
NITRATE	<0.40	<0.40	-	-
pH	7.35	7.28	1.45954	.1443
POTASSIUM	2.0	1.6	1.60923	.1074
SODIUM	8.9	11.2	-0.50522	.61006
SULFATE	18.5	43.3	-2.43256	.0151
FLUORIDE	0.40	0.27	2.00219	.0455
SILICA	14.5	20.3	-3.79854	.00014

For these major parameter results that were non-detectable, the value inputted to calculate the average was estimated to be one third of the reporting limit for all reported non-detectable levels for a given parameter. This was done because parameter results

reported as non-detectable don't guarantee the parameter is completely absent from the sample. In the study, nitrate was non-detectable in all well samples and therefore the mean was less than the reporting limit of 0.40 ppm.

Significant differences were seen with most of the major parameters between the first Watertown Township survey and the special area survey. The exceptions were pH, potassium and sodium. Of particular importance was the difference in chloride and arsenic levels between the two surveys with the special area having higher levels for both.

Average temperature for the wells tested in the special area was 11.4 degrees Celsius or 52.5 degrees Fahrenheit. An average flow rate from all the wells was 10.3 gallons per minute. Test results were non-detectable for all wells tested for chromium, copper, mercury, nitrate, nitrite, and selenium. Lead was detected in 3 wells at 0.005 ppm, 0.002 ppm, and 0.006 ppm, or 5, 2, and 6 ppb. These levels are below the EPA action level for lead of 0.015 ppm or 15 ppb. Homeowners with these detectable lead levels were provided information on reducing lead levels in their drinking water.

Figure 3 Chart showing special survey well locations based on chloride/bromide ratios. Chart was prepared by Michigan Department of Environment, Great Lakes and Energy, (EGLE), Lansing District, EGLE Drinking Water GIS database.

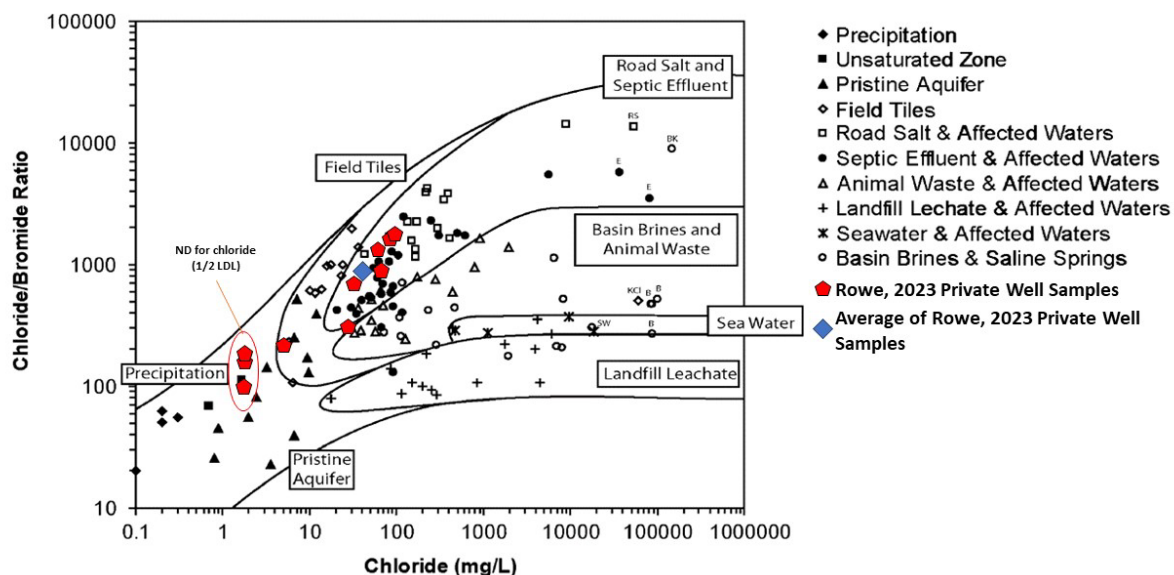


Figure 3. Rowe, 2023 Chloride:Bromide vs Chloride, plotted on chart from Panno et al., 2006. Non-detects for Chloride are plotted at 2 mg/L Chloride (1/2 the laboratory detection limit of 4 mg/L)

Of the 12 wells sampled, 10 wells were tested for bromide. The range seen was 0.011 – 0.096 ppm, or 11 – 96 ppb. The average value was 0.047 ppm or 47 ppb. Bromide was used to help determine the source of chloride in the wells using a Cl/Br ratio, (Rowe,

Garry, 1986, Davis, S.D., Whittemore, D.O, and Fabryka-Martin, J., 1998, Panno, S.V., Hackley, K.C., Hwang, H.H., Greenberg, S.E., Krapac, I.G., Landsberger, S., and O’Kelly, D.J., 2006). Ratio numbers were calculated as 3653, 1664, 4414, 1244, 209, 266, 709, 2011, 470, 128. For wells with chloride levels of 28.0 ppm or higher, this suggests road salting as the possible main source of chloride, (see Figure 3).

Outside the primary parameters analyzed, other water chemistry parameters were tested to ensure safe drinking water based on the National Primary Drinking Water Regulations, (United States Environmental Protection Agency (EPA), 2021).

Table 2: Comparison of 2022 survey data with parameters regulated by the EPA as part of the National Primary Drinking Water Regulations. All values are in parts per million (ppm).

Parameter	National Primary Drinking Water Regulations	2022 Mean
Arsenic	0.010	0.013
Barium	2.00	0.18
Cadmium	0.005	<0.0003
Chromium	0.10	<0.01
Copper	*TT action level =1.30	<0.05
Fluoride	4.00	0.27
Lead	*TT action level =0.015	0.002
Mercury	0.002	<0.0001
Nitrate	10.00	<0.40
Selenium	0.050	<0.001
Nitrite	1.00	<0.05

Lead and Copper are monitored through Treatment Techniques (TT) set by the Lead and Copper Rule (LCR). LCR requires action if more than 10% of customers taps

sampled exceed the action level, (United States Environmental Protection Agency (EPA), 2021).

The parameters manganese, zinc and total dissolved solids were also tested. Results for these parameters were within levels usually found in the Township. Lithium was also tested for in this survey. Recent work on lithium in drinking water has raised some concerns for Public Health and a possible drinking water standard for lithium may be forthcoming, (USGS, 2021), (Zeyan Liew, et.al., 2023). The range found for lithium was <0.010 ppm to 0.012 ppm, or <10 to 12 ppb. The average level was <0.01 or <10.0 ppb. Public water supplies may soon be required to monitor and test for lithium in their water systems.

Arsenic Levels

Levels of arsenic in the special study area were significantly higher than those seen in the rest of Watertown Township, (Table 1). To answer the question of why the levels of arsenic are so much higher in this area, several sources were considered.

The first concern was the Granger landfill located in the center of this area. Information provided from the EGLE Drinking Water GIS database, (EGLE, 2023), indicated that monitoring wells in the shallow glacial drift did not demonstrate levels of arsenic as high as those seen in the tested private wells, with the exception of one well, (MW-42Sr, 0.015-0.020 ppm). Direction of groundwater flow is to the north, see Figure 4.

Figure 5 shows direction of groundwater flow in the bedrock aquifer to be to the northeast. There are only 3 monitoring wells shown for the deeper bedrock aquifer. Two wells on the north side of the landfill, (MW-17B, MW-18B), indicated low arsenic levels, (not detected to 0.005 ppm). The third bedrock monitoring well, (MW-16rB), did indicate a level of arsenic close to what is seen in the private wells, (0.015-0.020 ppm). This well is located in the southeast section of the landfill site and is up-gradient to the landfill site. Monitoring well MW-16rB would reflect groundwater not affected by the landfill and does have a level of arsenic close to a private well south of the landfill on Grand River Highway, which would also be up-gradient from the landfill.

Other information from EAGLE also indicates that arsenic levels seen in the special study area have been seen in other locations in the Tri-County areas of Ingham, Clinton and Eaton counties, but are not common. Most wells sampled in this area usually have levels of arsenic below the EPA drinking water standard of 0.010 ppm or 10.0 ppb. These higher levels of 0.011 to 0.026 appear to be unique for this special study area. This information is provided in Figure 6.

Figure 4

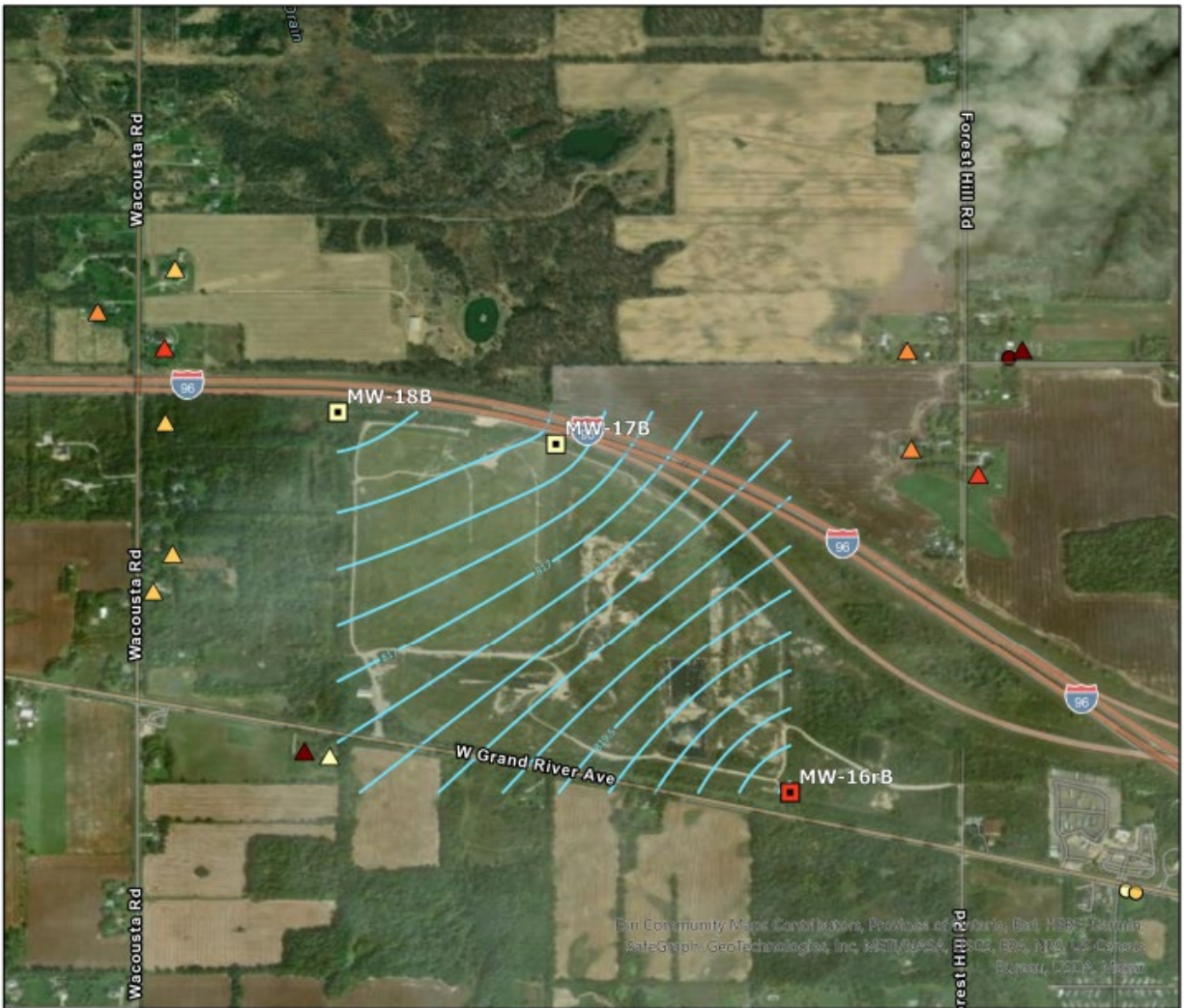


Granger Grand River Landfill - Groundwater flow and Arsenic levels in Monitor Wells, Lower Drift Aquifer (January, 2023 sampling) and Private wells (June 2023 sampling)

Legend

Monitor Wells - ALL Arsenic (ppm)	Rowe_Samples (2023) Arsenic (ppm)
0 - 0.005	0 - 0.005
0.005 - 0.01	0.005 - 0.010
0.01 - 0.015	0.010 - 0.015
0.015 - 0.020	0.015 - 0.020
0.020 - 0.025	0.020 - 0.025

Figure 5

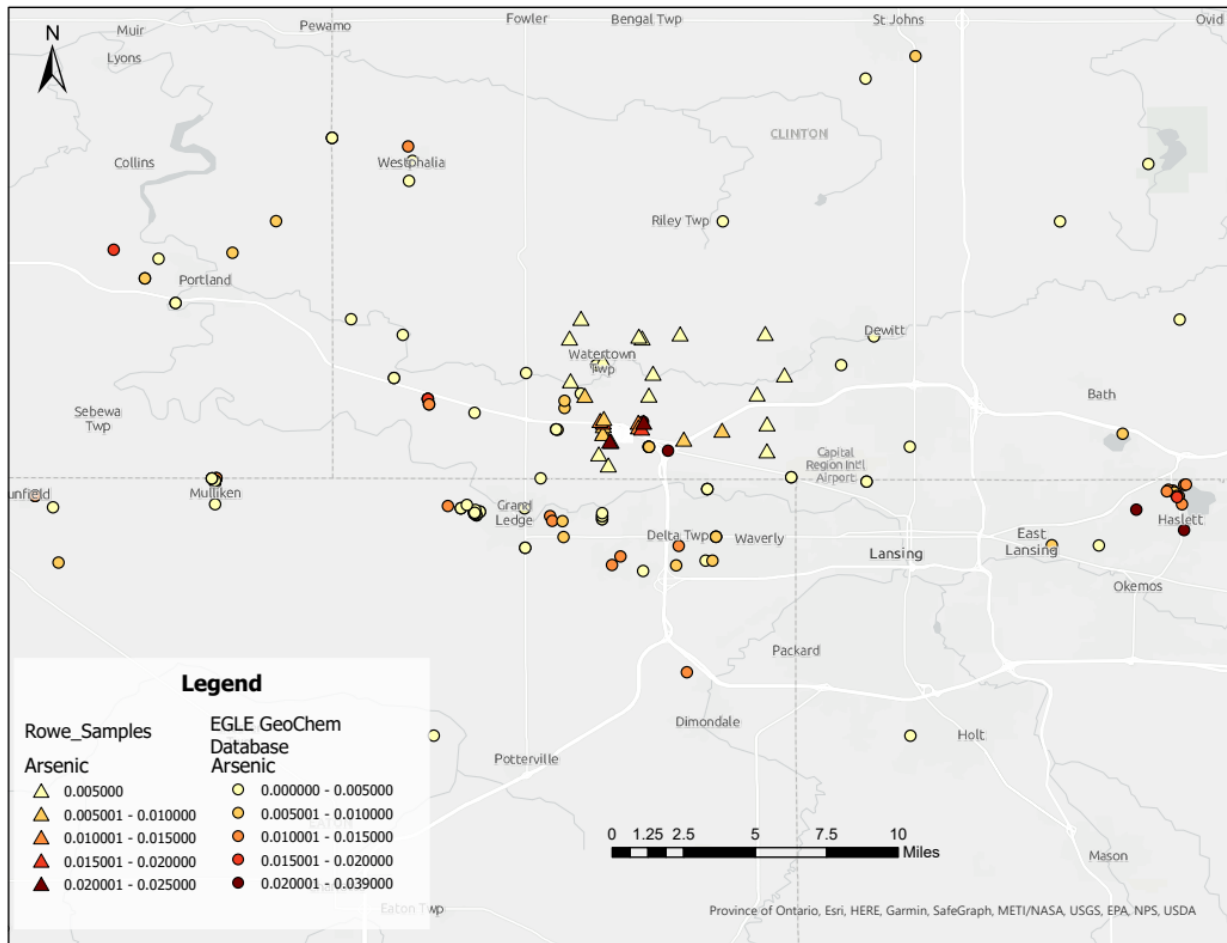


Granger Grand River Landfill - Groundwater flow direction and Arsenic levels in Monitor Wells, Bedrock Aquifer (January, 2023 sampling) and Private wells (June 2023 sampling)

Legend

Bedrock Monitor Wells	Rowe_Samples (2023)
Arsenic (ppm)	Arsenic (ppm)
□ 0.00 - 0.005000	△ 0 - 0.005
■ 0.005001 - 0.010000	▲ 0.005 - 0.010
■ 0.010001 - 0.015000	▲ 0.010 - 0.015
■ 0.015001 - 0.020000	▲ 0.015 - 0.020
■ 0.020001 - 0.025000	▲ 0.020 - 0.025

Figure 6



Another possible source for the arsenic levels is road salting causing conditions near highways and major roads to increase mobilization of heavy metal levels into the environment, (Backstrom, et.al., 2003, Schuler, et.al., 2018). Road salting may change soil structure, soil chemistry, and the release of heavy metals such as lead, mercury, chromium, and arsenic. Figure 7 provided by EGLE, shows levels of arsenic in relation to location or proximity to the highway corridor (Grand River Rd./I-96/69). These diagrams suggest that the cause of the arsenic levels in this area could also be road salting. As indicated earlier it was determined from the chloride/bromide calculations that road salting could be the primary cause of the increased chloride levels in this area.

Figure 7 Charts showing the relation between arsenic levels in sampled wells and distance from the major roads (EGLE).

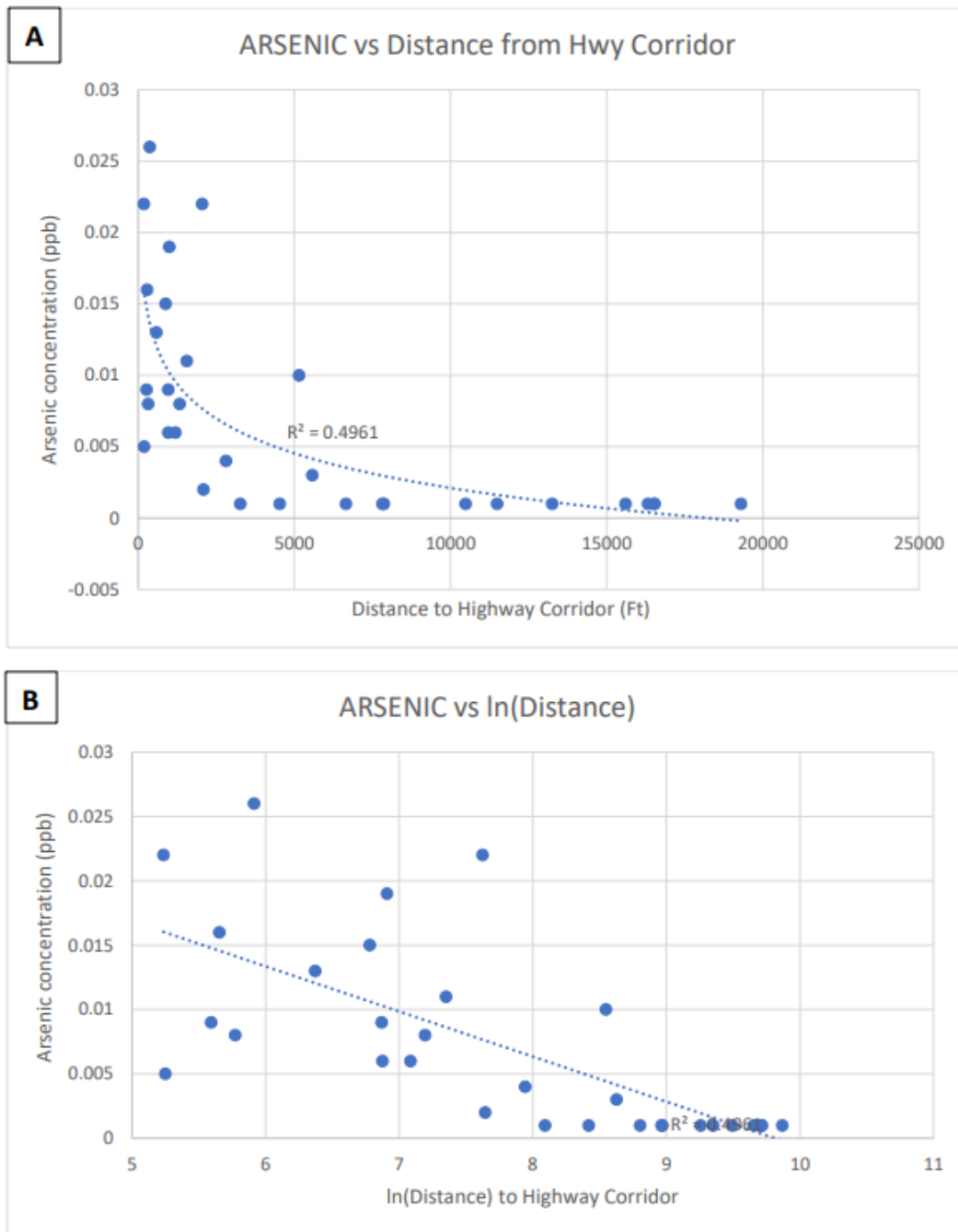


Figure 1 – A) Arsenic concentrations vs the linear distance to Highway corridor (Grand River/I-96/69), with logarithmic regression trendline. **B)** Arsenic concentrations vs the natural log of distance to Highway corridor (Grand River/I-96/69). Data from Rowe, 2023 residential well sampling.

The special study area has higher hardness, calcium, magnesium, sulfate and iron levels than the rest of Watertown Township, see Table 1. Eleven wells were also sampled for volatile organic compounds. Results were “Not- Detected” for all eleven wells. Michigan State University also collected samples for DNA sequencing of microbes, total organic carbon, and nitrogen in the groundwater, while also checking for oxidation - reduction conditions. The oxidation - reduction conditions in the groundwater were typical for bedrock wells. One well had an unusually high total organic carbon result compared to the other wells,(Shrenk, M., 2023). Other results were still pending at the writing of this report.

In Summary

Results of the water well testing in this special area of Watertown Township indicated chemistry that is very unique and different from the rest of the Township, Table 1. The water has much higher hardness with higher calcium, magnesium, iron, conductivity and sulfates. Chloride levels were also much higher and Cl/Br ratios still suggest road salting as the primary cause. As with other Township reports, water softener wastewater discharges from homes may also be contributing to the chloride levels.

Arsenic levels are a major concern. The source of the arsenic may be natural. As suggested by some recent research, road salting may also be causing local conditions to mobilize arsenic in the groundwater. The landfill site in this location was considered as a possible source, but the monitoring well data from the site, in addition to other well testing in this Michigan location seems to rule this out.

Recommendations

Homeowners and business facilities in this area should be advised about the groundwater chemistry in this area of the Township. Homeowners and business facilities need to be encouraged to have their private water wells tested for a routine bacteriological, partial chemical and arsenic test every 2 to 3 years. Sample kits are available at the Michigan Drinking Water laboratory, which can be reached at 517-335-8184. Wells in this area should also be sampled every 5 years for a more complete water chemistry testing, such as the one in this study. To help with the reduction of chloride in this area, facilities and homes need to inspect the discharge of water softener system wastewater to reduce the impact to the environment. Some water treatment systems can be purchased that do not use salt. Further assistance and questions may be directed to the Mid-Michigan District Health Department office at 989-224-2195.

Acknowledgements

This special project acknowledges the important contributions of Watertown Charter Township. The township's financial and administrative assistance was critical to the success of the survey. In particular, Andrea Z. Polverento, Township Planning Director, was very helpful in finding suitable sampling sites which was very much appreciated.

Dr. Matthew Shrenk and his team of students were very helpful in the collection of water samples. His analysis for several parameters including oxidation-reduction conditions, total organic carbon, DNA sequencing of microbes, etc., will be helpful in better understanding the groundwater in this area.

Staff from EGLE were also very helpful in providing some of the groundwater mapping conditions. They also provided critical data information regarding arsenic levels for groundwater in this area.

Finally, this study would like to give a big "thank you" to all the homeowners who participated in the sampling of their water supply wells the project would not have been possible without their help.

References

- Backstrom, M., Karlsson, S., Backman, L., Folkesson, L., Lind, B., (November 5, 2003), Mobilization of heavy metals by deicing salts in a roadside environment, Man-Technology-Environmental Research Centre, Orebro University, SE-701 82, Sweden, Swedish National Road and Transport Research Institute, SE-581 95 Linköping, Sweden, Swedish Geotechnical Institute, SE-581 93 Linköping, Sweden. *Water Research* 38, (2004) 720-732.
- Davis, S.D., Whittemore, D.O, and Fabryka-Martin, J., (1998) "Uses of Chloride/Bromide Ratios in Studies of Potable Water", *Groundwater*, Vol. 36, No.2, March-April.
- EGLE, Environment, Great Lakes, and Energy, State of Michigan, EGLE Drinking Water GIS database, (2023).
- Matthew, Schuler, S., Relyea, Rick, A., A Review of the Combined Threats of Road Salts and Heavy Metals to Freshwater systems, (May 2018), Vol. 68 No. 5 *BioScience*.
- Panno, S.V., Hackley, K.C., Hwang, H.H., Greenberg, S.E., Krapac, I.G., Landsberger, S., and O'Kelly, D.J., (2006) "Characterization and Identification of Na-Cl Sources in Groundwater", *Groundwater*, Vol 44, No. 2.

Rowe, Garry, (1986), Report on the Aquifers of Ingham County, Ingham County Health Department, variously paged.

Shrenk, M.,(2023), MSU Department Of Earth and Environmental Sciences, Associate Professor, Department of Earth & Environmental Sciences, Associate Professor, Department of Microbiology & Molecular Genetics,
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United States Environmental Protection Agency (EPA), 2021, Drinking Water Requirements for States and Public Water Systems - Lead and Copper Rule at <https://www.epa.gov/dwreginfo/lead-and-copper-rule>

United States Environmental Protection Agency (EPA), 2021, National Primary Drinking Water Regulations, Accessed August 6, 2021 at <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>

POWERPOINT PRESENTATION

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CHARTER TOWNSHIP SPECIAL PROJECT**

2023

GARRY W. ROWE, R.S., M.S.

September 21, 2023