

# STERLING

2025 STRATEGIC PLANNING PRESENTATION

# VISION



2024  
STERLINGFAST 5K



DODGE PARK  
FARMERS MARK



CULTURAL EXCHANGE



2024 THINK STERLING  
GREEN EVENT

## CITY COUNCIL

Mayor Michael C. Taylor  
Mayor Pro Tem Liz Sierawski  
Councilwoman Deanna Koski  
Councilman Michael V. Radtke Jr.  
Councilwoman Maria G. Schmidt  
Councilman Henry Yanez  
Councilwoman Barbara A. Ziarko

## CITY MANAGER

Mark D. Vanderpool



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CITY TREE CANOPY



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## 2025 Strategic Planning Session

Tuesday, January 28, 2025

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Community Risk Assessment & Fire Department Responses .....	3-49
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# Strategic Planning



# Topics

- **Community Risk Assessment Presentation**
- **Medical Priority Dispatching**
- **Peaking Staffing Ambulance**
- **EMS Mobile Integrated Health**
- **Fire Prevention Update**
- **Quick Response Vehicle**





# Center for Public Safety Management



**The Exclusive Provider of Public Safety Technical Assistance to  
the  
International City/County Management Association**

**Joe Pozzo: Senior Manager for Fire and EMS**



# Community Risk Assessment Standards of Cover

**Community Risk Assessment (CRA) and Standards of Cover (SOC)** are analysis tools used by fire departments to evaluate and formulate planning initiatives to mitigate risks within a community.

Together, they align resources, strategies, and performance objectives with the unique risks and needs of a community.



# Community Risk Assessment Standards of Cover

- Identification of and assessing community risk.
- Analysis of demographic, geographic, and socio-economic factors that impact risk levels.
- Guide community risk reduction strategies.
- Ensure that the distribution and capabilities of emergency response units align with identified risks.
- Provide a framework for delivering the right level of service to reduce harm and improve outcomes in emergencies.
- Define specific, measurable goals for response times, resource deployment, and operational efficiency and effectiveness.

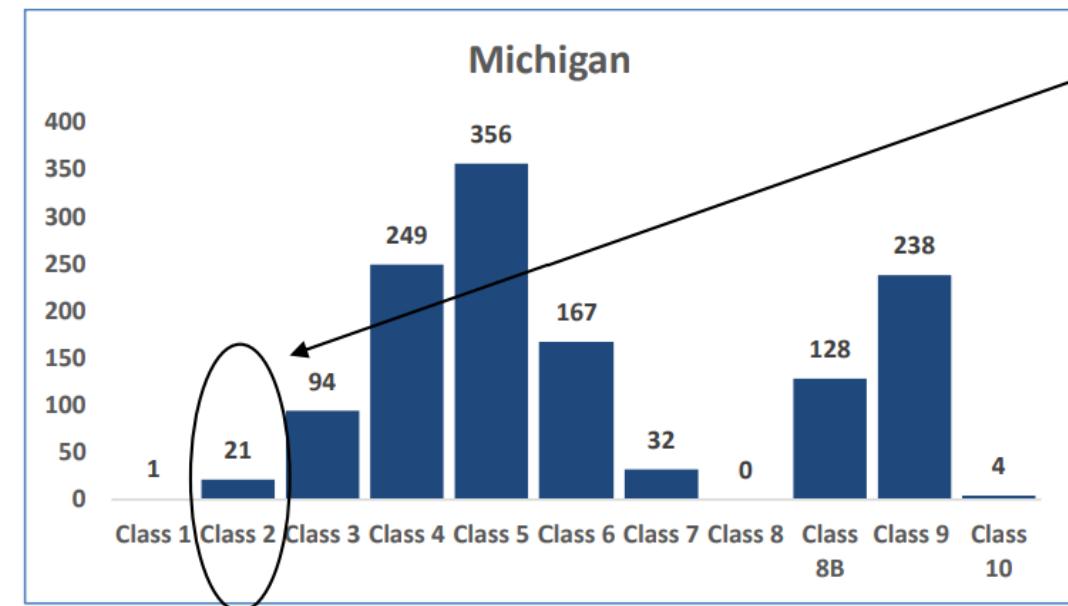
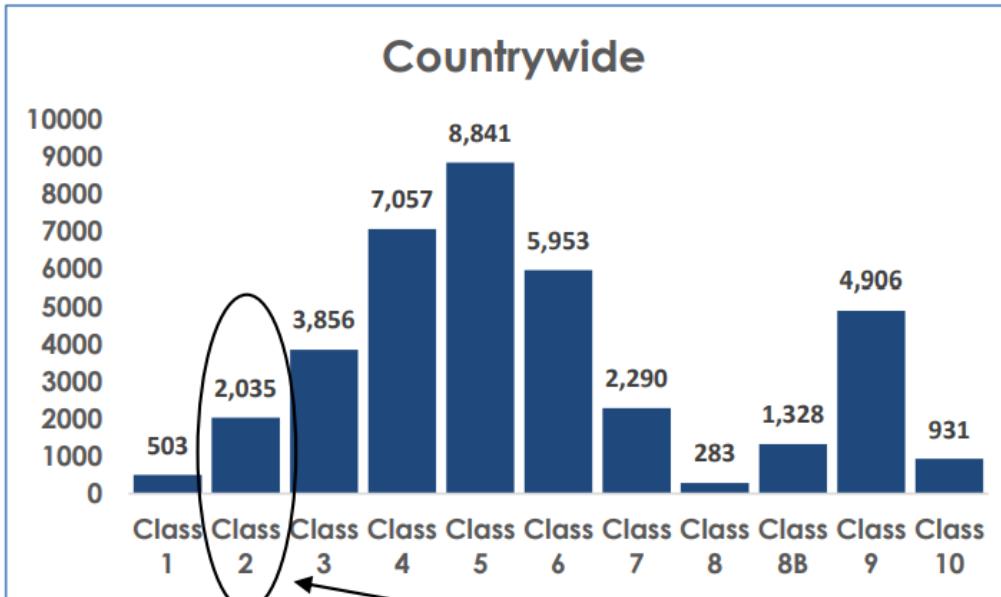


# CPSM Report Key Findings

- CPSM found the Sterling Heights Fire Department to be a professional and a professionally managed Fire and EMS department.
- The City of Sterling Heights has achieved a Class 02 ISO-PPC rating, which is an achievement the community should be proud of.
- The community risk and service demands in Sterling Heights are numerous and include EMS, fire, technical rescue, hazardous materials, diverse building stock, density challenges, transportation emergencies, major industry, environmental factors, and socio-needs population.



# CPSM Report Key Findings



**Sterling Heights ISO score**



# CPSM Report Key Findings

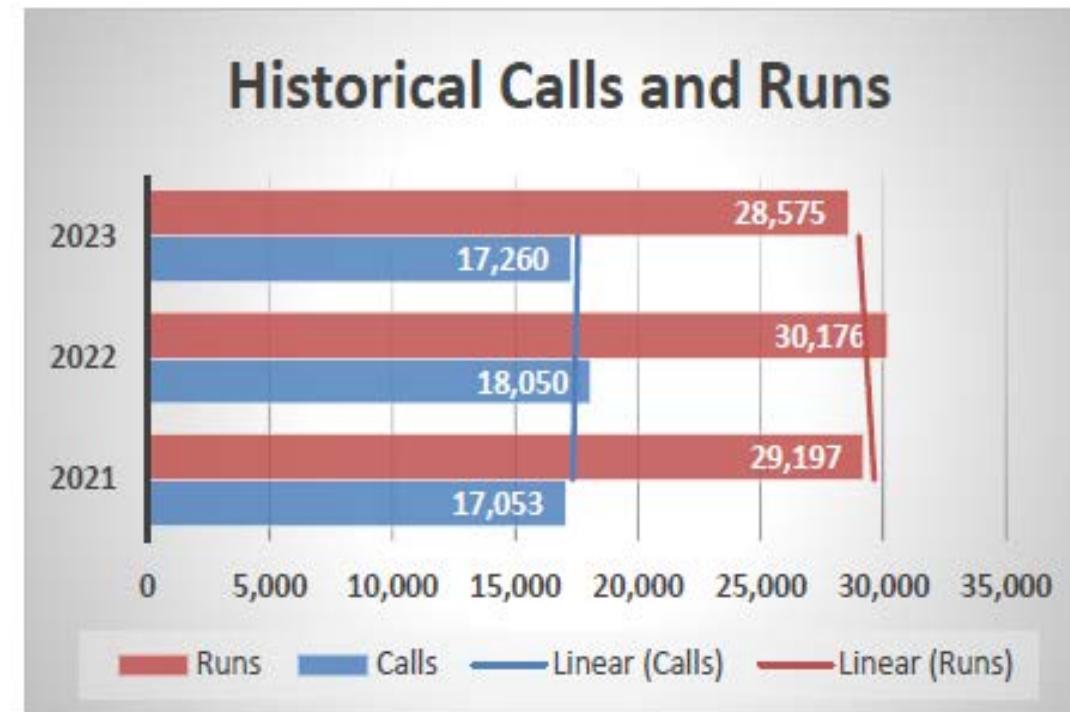
- The SHFD has developed a comprehensive Emergency Medical Services (EMS) division that reflects the community's needs and strives for excellence in all aspects of service delivery.
  - Program delivery includes public education, preventive health programs, and robust community engagement through a new Mobile Integrated Health program.
  - The Fire Marshal's Office estimates there are 3,600-5,500 or more inspectable properties in the city. Efforts need to be focused on determining the fire prevention workload.



# CPSM Report Key Findings

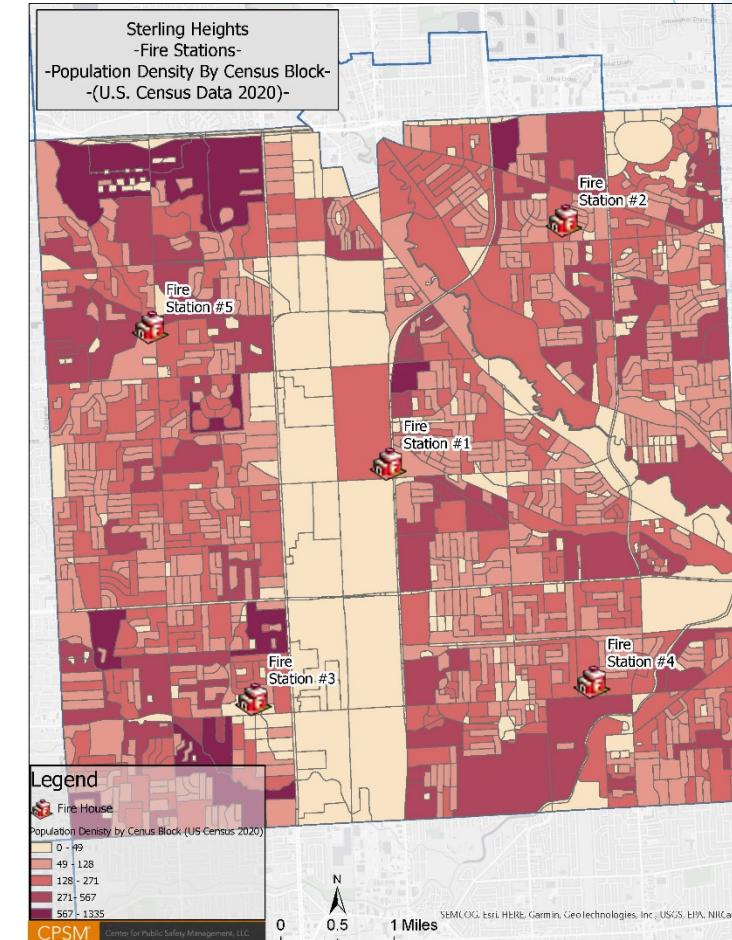
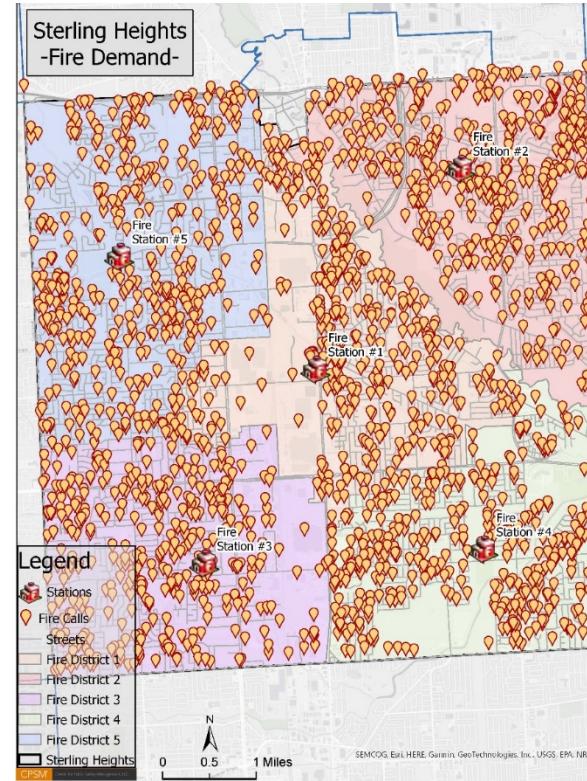
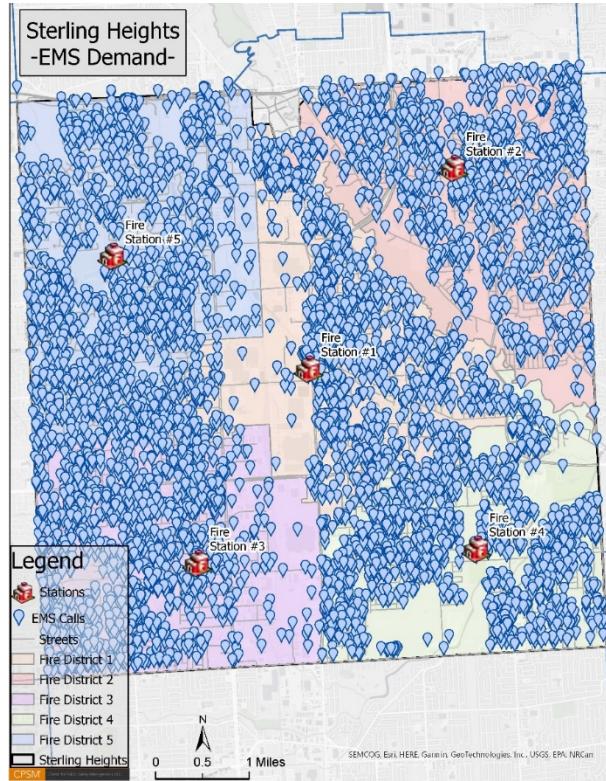
## Fire and EMS Workload

Overall,  
**Runs** are trending  
down from 2021 to  
2023  
and  
**Calls** are trending  
up from 2021 to  
2023.



# CPSM Report Key Findings

## Fire and EMS Demand





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# CPSM Report Key Findings

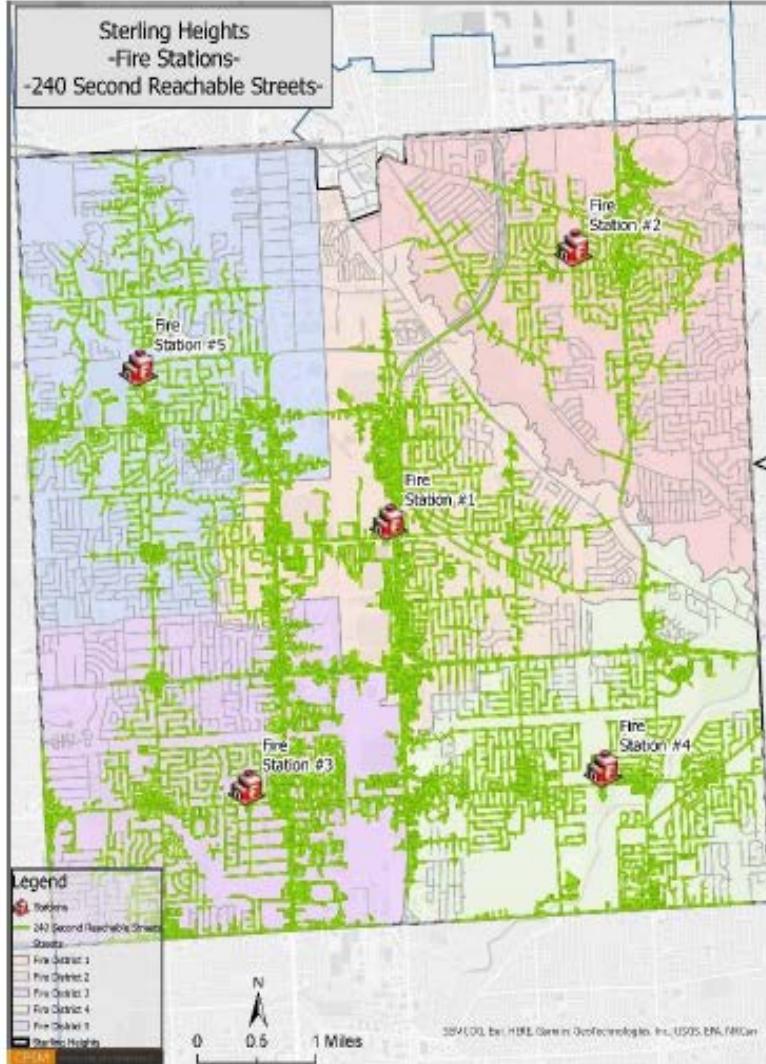
## Response Times

Response Time Category	NFPA 1710 Benchmark 90 <sup>th</sup> Percentile	SHFD 2023 Data
Call Processing	≤ 64 seconds 90% of the time ≤ 90 seconds 90% of the time (Special Call Types)	<b>102 Seconds</b> (All Call Types)
Turnout	≤ 80 seconds for fire and special operations 90% of the time ≤ 60 seconds for EMS responses 90% of the time	<b>108 Seconds</b> <b>96 Seconds</b>
Travel	≤ 240 seconds for the first arriving engine company to a fire suppression incident 90% of the time ≤ 360 seconds for the second company 90% of the time ≤ 480 seconds to assemble the initial first alarm assignment on scene 90% of the time for low/medium hazards, and 610 seconds for high-rise fire incidents 90% of the time	<b>354 Seconds</b> By GIS: 65.36% of City meets standard. By GIS: Each district has moderate to significant gaps. By GIS: Stations 2, 3, 4, 5 have coverage gaps.



# CPSM Report Key Findings

## Response Times



**Using current road network,  
65.36% of the city meets the  
NFPA 240 second travel time  
benchmark.**

*As a note, this is a 90th  
percentile standard.*

*The SHFD travel time by  
Station District for Fire and  
EMS incidents is  
5.9 minutes at the  
90th percentile.*

The SHFD response times align  
with other cities with similar  
population and number of stations.

### Comparative Response Times

Dispatch Time: 1.6-1.7 mins.

Turnout Time: 1.6-1.9 mins.

Travel Time: 5.9-6.0 mins.

Total Response Time: 8.4-8.5 mins.

First Due Area	90th Percentile Response Time			
	Dispatch	Turnout	Travel	Total
Station 1	1.8	1.8	6.0	8.7
Station 2	1.6	1.9	6.0	8.8
Station 3	1.6	1.8	6.0	8.7
Station 4	1.6	2.0	5.7	8.2
Station 5	1.7	1.8	5.8	8.2
<b>Total</b>	<b>1.7</b>	<b>1.9</b>	<b>5.9</b>	<b>8.5</b>



# CPSM Report Key Findings

- The SHFD can assemble an Effective Response Force (ERF) on the initial alarm assignment for a single-family dwelling fire only and is deficient on apartment and strip mall/commercial fires.
  - The SHFD does have a limited number of high-rise buildings and is deficient in this category (*as is most smaller municipalities and fire departments overall*).
- The mutual aid system the SHFD is signatory to is robust in that it includes contiguous and regional assets.
- **Automatic aid is a greater benefit**—the SHFD does not have automatic aid with surrounding jurisdictions.



# CPSM Report Key Findings

- CPSM assesses the SHFD does not have sufficient personnel to cover scheduled and unscheduled leave, vacancies created by separation from the department, and required training leave and maintain a staffing level of 29-per day.
- SHFD relies on overtime and Heavy Rescue staffing to fill vacancies.
- CPSM performed a staffing factor analysis:
  - Staffing Factor of 1.26 to maintain all positions filled with minimum overtime.
  - Equates to 7.54 additional FTEs per shift.
  - Common with CPSM studies to find deficiencies with FTEs to cover all leave and vacancies and the reliance on overtime.



# CPSM Report Key Recommendations

- CPSM recommends the SHFD develop a plan to sustain current levels of operational service to minimize further deficiencies in the current ISO Fire Service Rating Schedule.
- CPSM recommends that the SHFD collaborate with the Medical Director and regional healthcare stakeholders to assess the potential benefits and needs of a Mobile Integrated Health program and incorporate this program as an essential service.
  - This proactive approach will enable the SHFD to address the root causes of high EMS utilization and meet the evolving healthcare needs of the Sterling Heights community.



# CPSM Report Key Recommendations

- CPSM recommends the SHFD continue to work with the Macomb County Emergency Communications Center to expand EMS call determinants beyond the two primary (emergency or non-emergency) with a goal of establishing call determinants that dispatch the most appropriate resource(s) to the EMS call based on the acuity of the call.



# CPSM Report Key Recommendations

- CPSM recommends the SHFD develop a comprehensive fire prevention code enforcement inspection plan that aligns with NFPA 1730 - *Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations*, 2019 Edition.
- CPSM further recommends the SHFD contemplate the implementation of remote fire prevention inspections in accordance with NFPA 915 *Standard for Remote Inspections and Testing*, 2024 edition and local and state laws.



# CPSM Report Key Recommendations

- CPSM recommends the SHFD work with contiguous jurisdictions and expand the mutual aid concept to automatic aid to bolster first alarm structure fire responses.
- CPSM recommends the SHFD begin discussions with Utica and Warren regarding reciprocal automatic aid that includes the automatic response of the ladder from Utica for structure fire calls in buildings of 35' or more in height in the northern area of the city and Warren for structure fires of 35' or more in height in the southern area of the city.
- Currently having discussion with Warren on this topic for confirmed structure fires



# CPSM Report Key Recommendations

- CPSM recommends the SHFD utilize the staffing factor formula annually to more accurately budget for overtime and/or FTEs to fill historic shift vacancies caused by scheduled and unscheduled leave and vacancies created by separation from the department.
- CPSM recommends the SHFD monitor Squad workload, resiliency, and Unit Hour Utilization and develop a resource plan (staffing, ambulance, and equipment) that forecasts the addition of one additional peak time ambulance in any district where the higher workload and Unit Hour Utilization exists.



# CPSM Report Key Recommendations

- CPSM recommends the SHFD consider the implementation of the Quick Response Vehicle (QRV) concept as a response asset to reduce the wear and tear on heavy fire apparatus for low acuity EMS and fire related calls that would not require the heavy fire apparatus compliment of equipment.
- CPSM further recommends this new concept be implemented first at Station 1 (paired with Ladder 1).
  - Maintain 4-staffing on Ladder
  - 2-staff responds on QRV when dispatched
    - 2-staff remains with Ladder 1



# CPSM Report Key Recommendations

- CPSM recommends, as the SHFD Heavy Rescue is regularly out of service due to staffing creating a situation where it may be difficult to deliver technical rescue capabilities, the SHFD consider placing this unit out of service and transferring the rescue assets to the ladder and at a minimum, two engine companies (Rescue Engine concept).
- CPSM recommends the SHFD and city administration work together to sustain the minimum staffing of 29 positions per operational shift.



# Performance Objectives and Compliance Methodology

- A Standards of Cover includes performance objectives and compliance methodology for the city and the SHFD to consider.
  - Response times that align with NFPA 1710 and actual community characteristics (station locations, road network).
  - Unit Hour Utilization for Squad Units.
  - Staffing and Deployment
  - Community Risk Reduction
  - Mobile Integrated Health



# Performance Objectives and Compliance Methodology

- A Standards of Cover includes a compliance methodology to ensure performance objectives are successfully established, monitored, and maintained at the adopted or implemented level, or at an improved level.
  - Phase I: Establish and Review Performance Measures
  - Phase II: Evaluate Performance
  - Phase III: Develop Compliance Strategies
  - Phase IV: Communicate Expectations of the Standards of Cover
  - Phase V: Validate Compliance
  - Phase VI: Adjust and Repeat Process





# Medical Priority Dispatch

Recommendation from both

- Strategic Plan and Community Risk Assessment

Project started in 2024

- Required collaboration with
- COMTEC & Medical Direction

Allows for better utilization of resources

# Medical Priority Dispatch

## Old way

- Life Threatening
- Non-Life Threatening

## New response levels

- **Blue**- Critical Life Threatening (Closest Units)
- **Red**- Serious Medical call (Medic & Engine)
- **Orange**- Potentially Serious (Medic)
- **Yellow**- needs evaluation (EMT)
- **Green**- low priority (Can hold for short duration/EMT)

## Next Steps

27

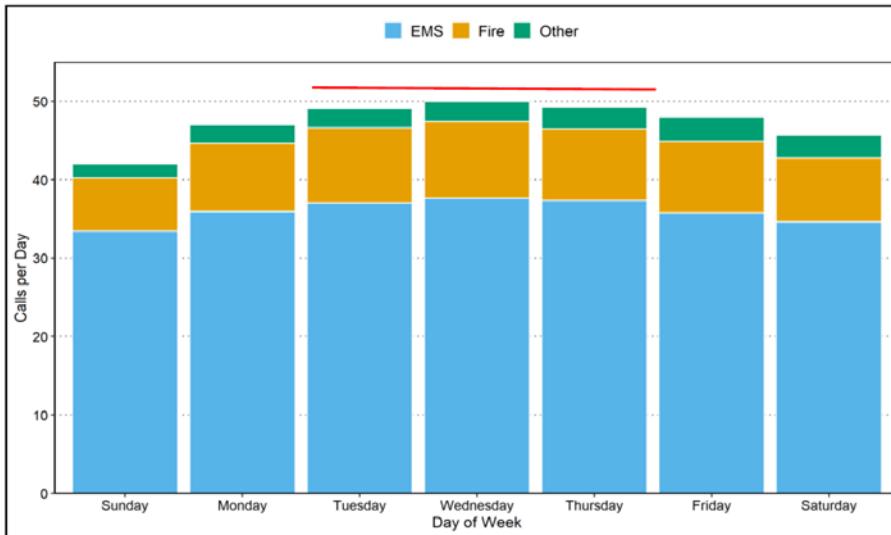
Adjusting response plans



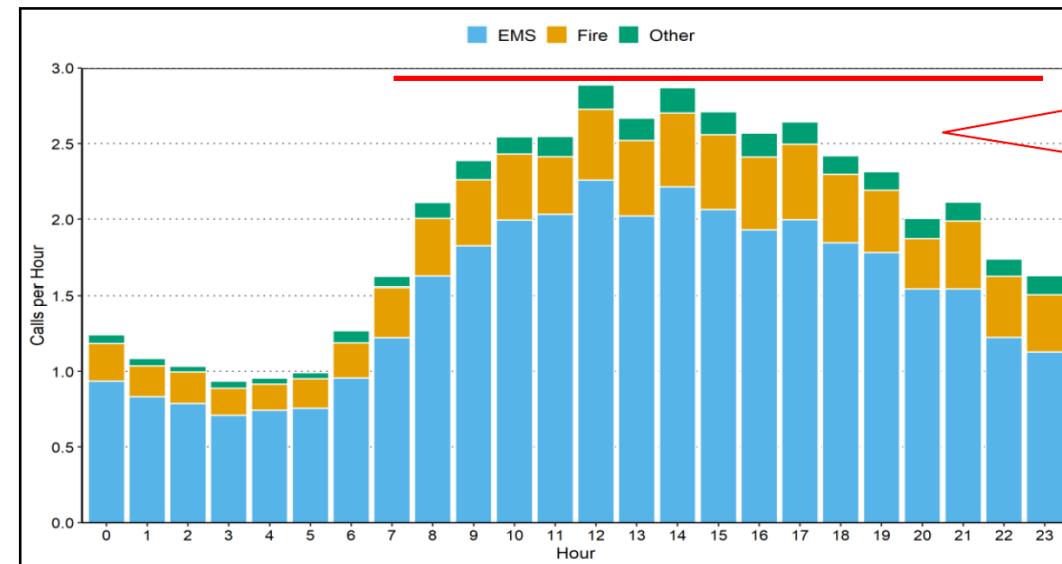


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# Peak Time Ambulance(s)



Peak call times are consistent with CPSM data analyses nationally.

	busiest days						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
emp 1			X		X		X
emp 2			X		X		X
emp 3			X		X		X
emp 4			X		X		X
			2 amb	2 amb	2 amb	2 amb	



# Peak Time Ambulance(s)

## Implementation

- Data Driven
- Memorandum of Understanding with IAFF
- Trial Basis with 4 FF/EMT
- addressing low acuity calls during peak hours

Project start date in Summer of 2025

- Requires Medical Priority Dispatch
- Work 4 10-hour days TWTHF
- Allows from 1 to 2 EMT ambulances

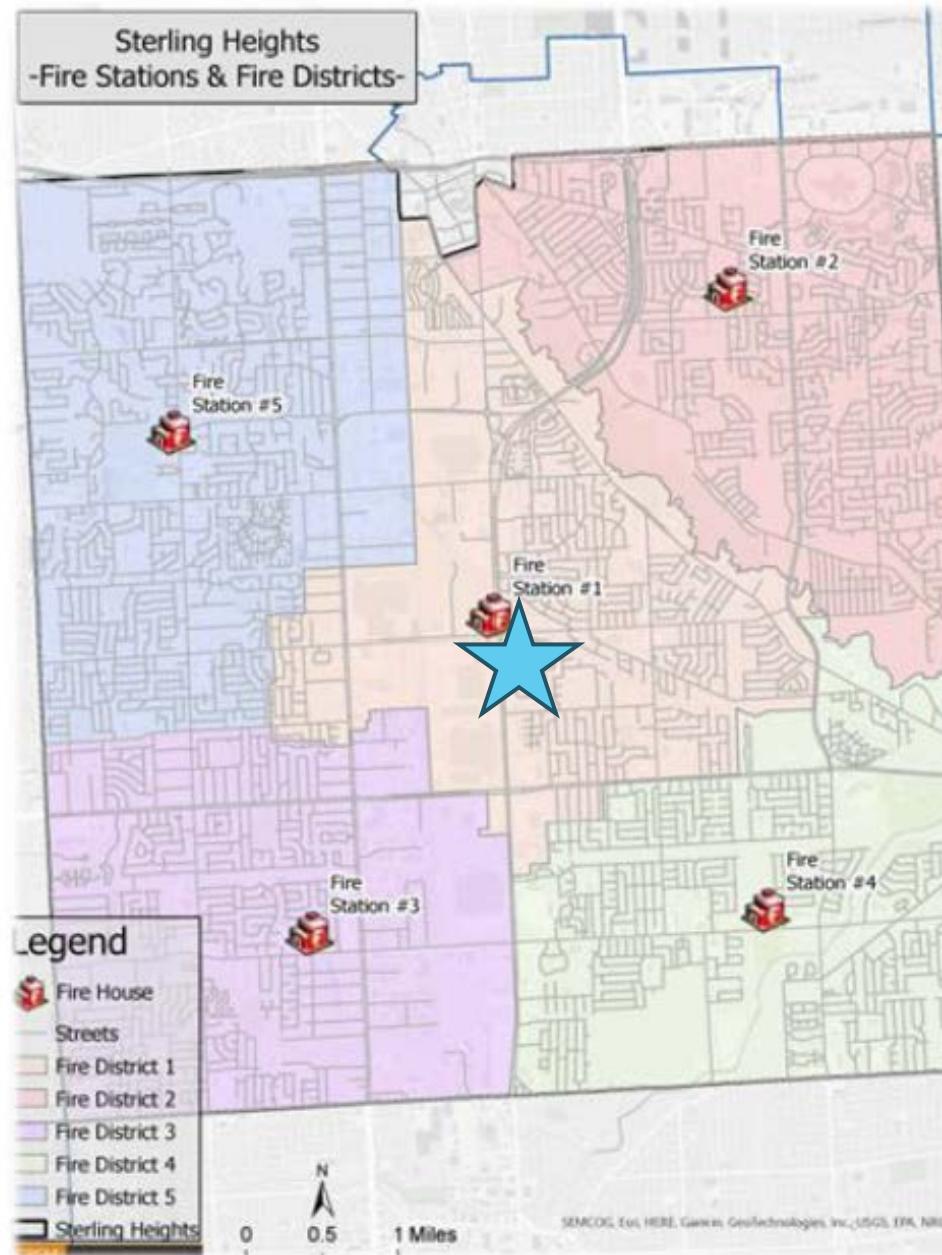


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## Location

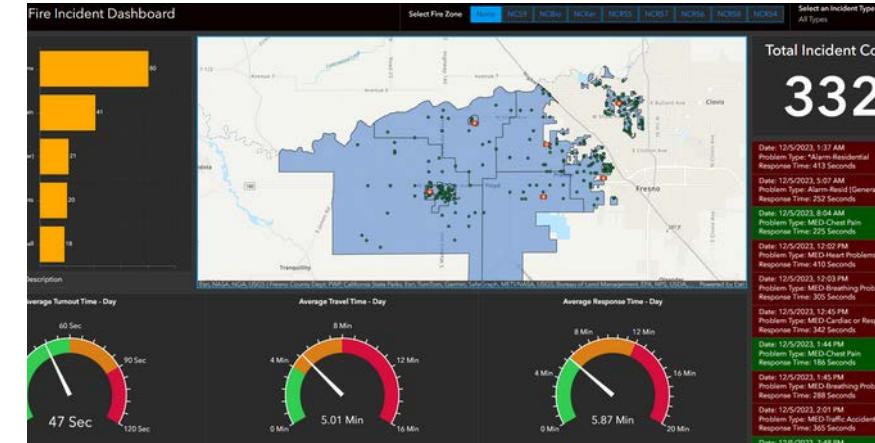
- Work from station 1
- Goal of 1-2 Basic ambulances



# Mobile Integrated EMS Health Coordinator

## Job Tasks

- Medical background
- Statistical analysis of EMS calls
- Develop Strategies & Effective Options
- Work in collaboration with City Case workers, Community Risk Officer
- Improve community health & wellness



# Mobile Integrated Health



Statistical analysis of EMS calls

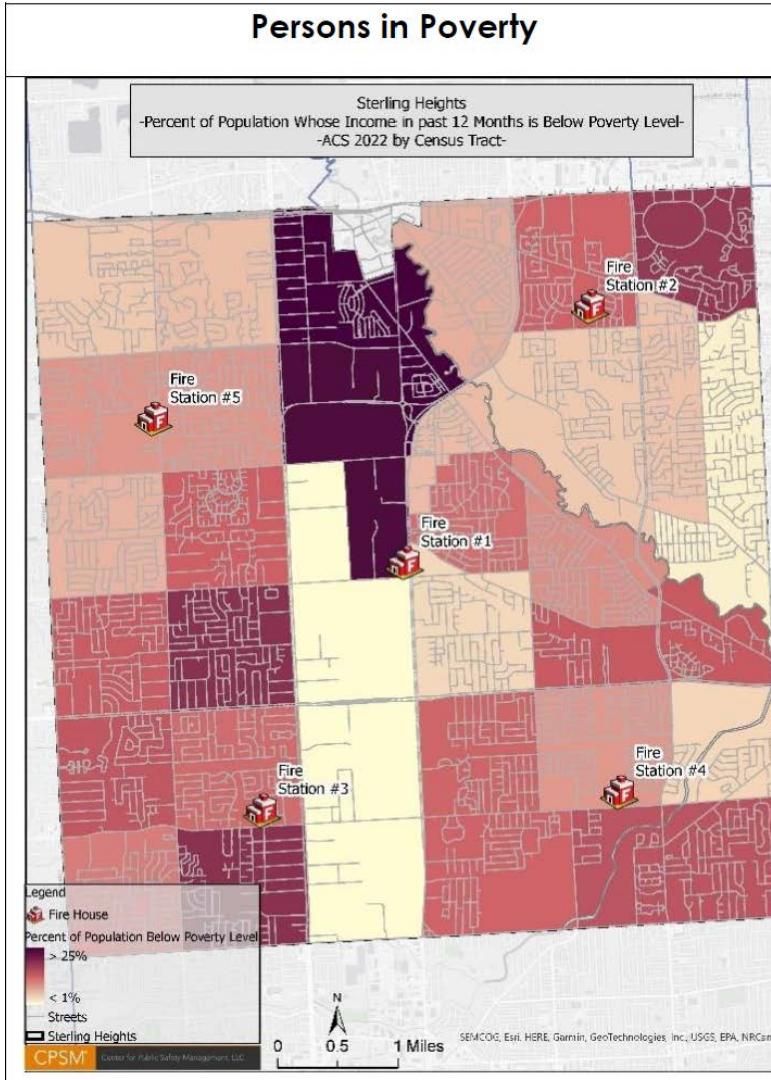
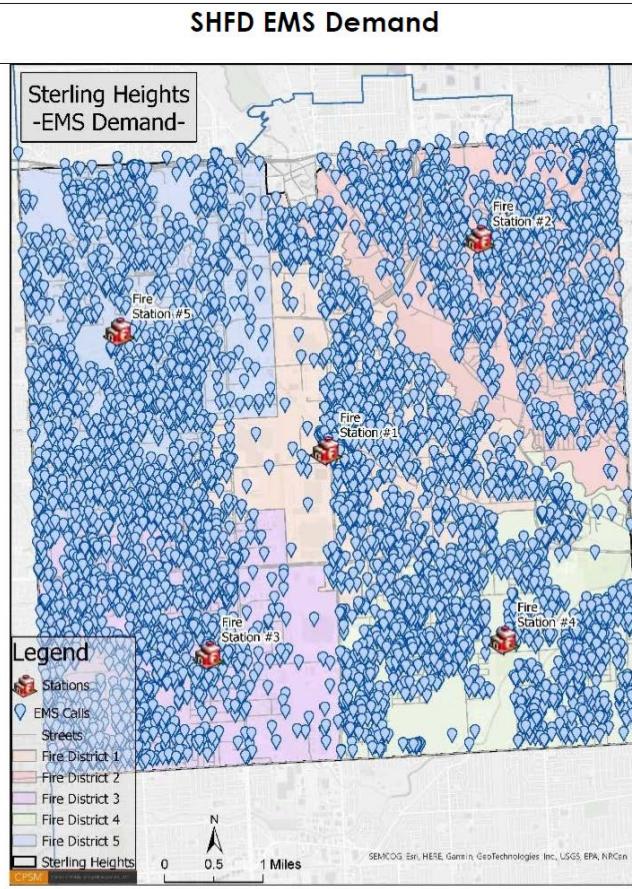
- Starting point for program
- Call location, Older adult location, economics
- Develop Strategies & Effective Options to reduce EMS calls
- Improve community health & wellness



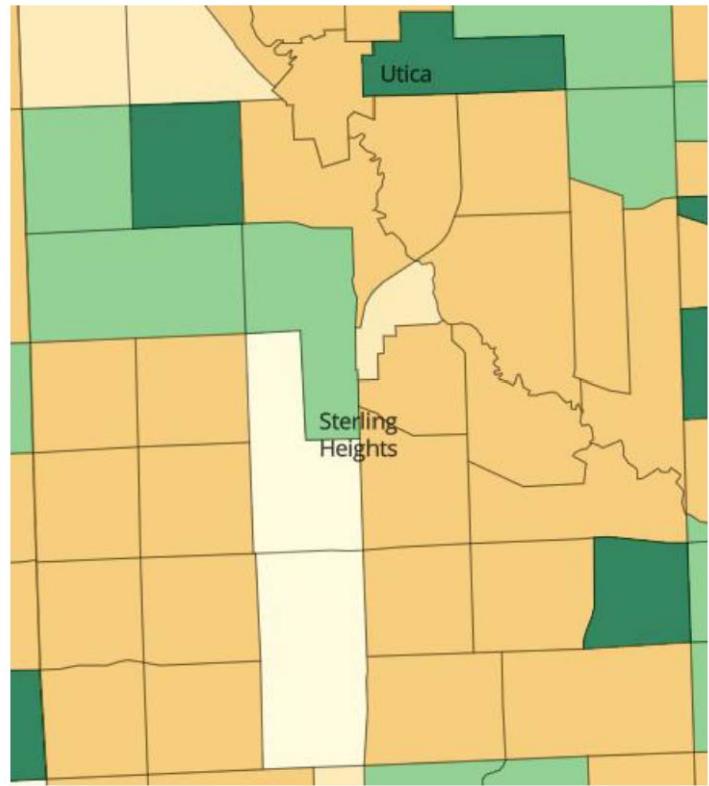
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# Mobile Integrated Health



Older Adults



# Mobile Integrated Health

## Primary goals-

- Reduce the responses to super users
- 161 residents accounted for 1126 transports
- Work to reduce the residential lift assists
- Educate and help the underserved
- Develop collaboration with other health providers



# Mobile Integrated Health

## Future goals of program

- Collaborating with community organizations to address healthcare
- Community Education: Offering health and safety education programs to promote wellness and prevent emergencies within the community.
- Mental Health Crisis Response: Vulnerable Population Outreach:
- Post-discharge Follow-up:
- Chronic Disease Management:
- Medication Management:

# Quick Response vehicle



Primary goals-

- Need to Staff to 30
- Staff Ladder truck with 4
- Would be paired with Ladder truck
- Two from Ladder would respond
- Low acuity responses to reduce miles on Ladder

# Quick Response vehicle

## Implementation steps

- Hire more staff (9)
- Use SAFER & GEMT as financial resources
- Implemented after
  - Medical Priority Dispatch
  - Peak staffing

# Community Risk Reduction Officer

## Job Tasks

- Statistical analysis of fire risks
- Develop Strategies & Effective Options
- Develop community risk reduction programs
- Help with High Risk & High-Profile inspections
- Partners with MIH when needed



# Fire Prevention Next Steps

Develop a comprehensive plan to follow NFPA 1730

## Following Initiatives

- Ensure Data accuracy
- Workload analysis
- Workflow improvement process
- Implement NFPA 915 Remote Video Inspections
- Quality improvement process



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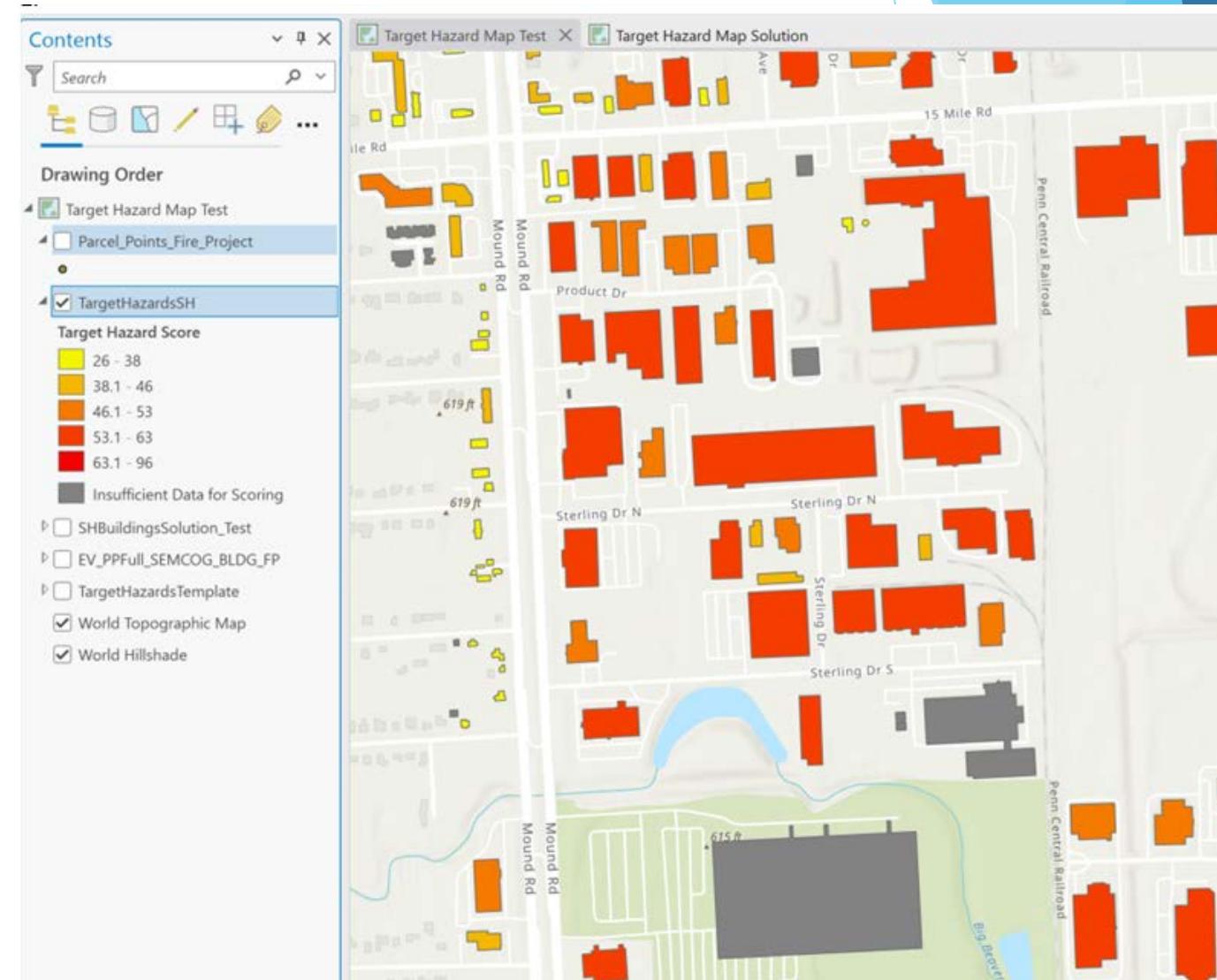
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# Community Risk Assessment Hazard Analysis



## Primary goals-

- Increase data accuracy
- Score the buildings
- Set priorities for inspections
- Data Driven decisions





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# Data used to develop Hazard Analysis

BSA data

BS&A Online | Home | Services |

City of Sterling Heights | Macomb County | MI

Municipalities | Currently not signed in | BS&A SOFTWARE | powered by

Search: All Records | By: Address | 10-10-28-351-002 | Search

SERVICES

- Public Records Search
- All Record Search
- Assessing Search
- Building Department Search
- Current Tax Search
- Miscellaneous Receivables

Search Results for "10-10-28-351-002" using the **Parcel Number** Search in Assessing (2024), Special Assessment, Tax (2024), Building Department, and Miscellaneous Receivables

Not finding what you are looking for? Try refining your search to narrow your results or changing your search type.

Sort By: **Parcel Number** | Display Style: **List View** | Want more search result detail? Click to the left to change your **Display Style**

Records Per Page: 50 | Displaying items 1 - 50 of 98

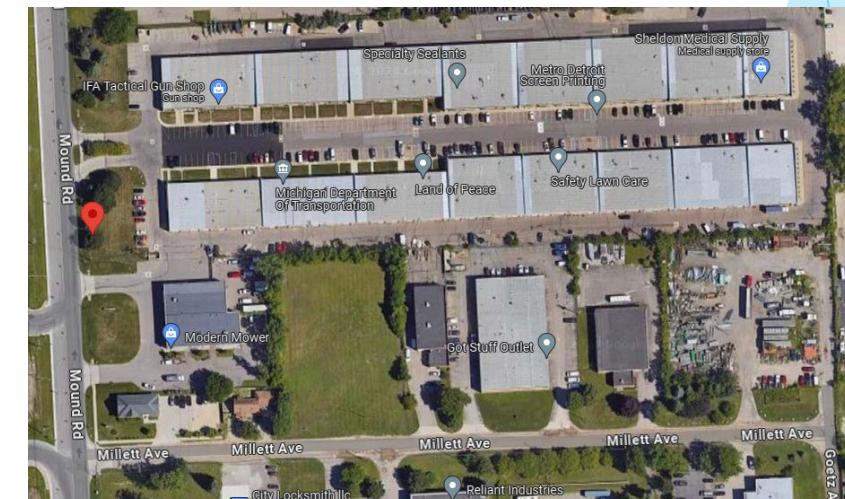
Parcel Number	Address	Owner	Type
10-10-28-351-002, 10-10-28-351-002 (Parcel Number)	35452 MOUND RD	MOUND INDUSTRIALIZED COMMONS, LLC	
10-10-28-351-002-001 (Parcel Number), 10-10-28-351-002-001 (Customer ID)	35406 MOUND RD	PALM SWEETS	**Personal Property
10-10-28-351-002-005 (Parcel Number)	35414 MOUND RD	MICHIGAN DEPT OF TRANSPORTATION	**Personal Property
10-10-28-351-002-030 (Parcel Number)	35450 MOUND RD	SAFETY LAWN CARE	**Personal Property
10-10-28-351-002-043 (Parcel Number)	35410 MOUND RD	CONSTRUCTION, CONSULTING & TESTING	**Personal Property
10-10-28-351-002-052 (Parcel Number)	35400 MOUND RD	LEADER BUSINESS MACOMB LLC	**Personal Property
10-10-28-351-002-057 (Parcel Number)	35426 MOUND RD	RETAIL HOLDINGS, LLC	**Personal Property
10-10-28-351-002-059 (Parcel Number)	35424 MOUND RD	GREER AND KIRBY	**Personal Property
10-10-28-351-002-063 (Parcel Number)	35464 MOUND RD	HEGEMON ELECTRONICS	**Personal Property
10-10-28-351-002-064 (Parcel Number)	35466 MOUND RD	NONNENMANN INC.	**Personal Property

Displaying items 1 - 50 of 98

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Parcel data



# Data used to develop Hazard Analysis

## Inspection Reporting online (IROL)

- Started in 2013
- System to store reports that used to be sent to Fire Department
- Since 2013
  - 11,724 reports
- 2024
  - 1,174 reports filed
- Need to determine if the 1,174 reports filed
  - Covers all inspections needed
  - MNP needs to file four reports/year
  - Current process with IROL all deficiencies are assigned to an inspector for follow up
  - Need to develop a Quality Assurance Program



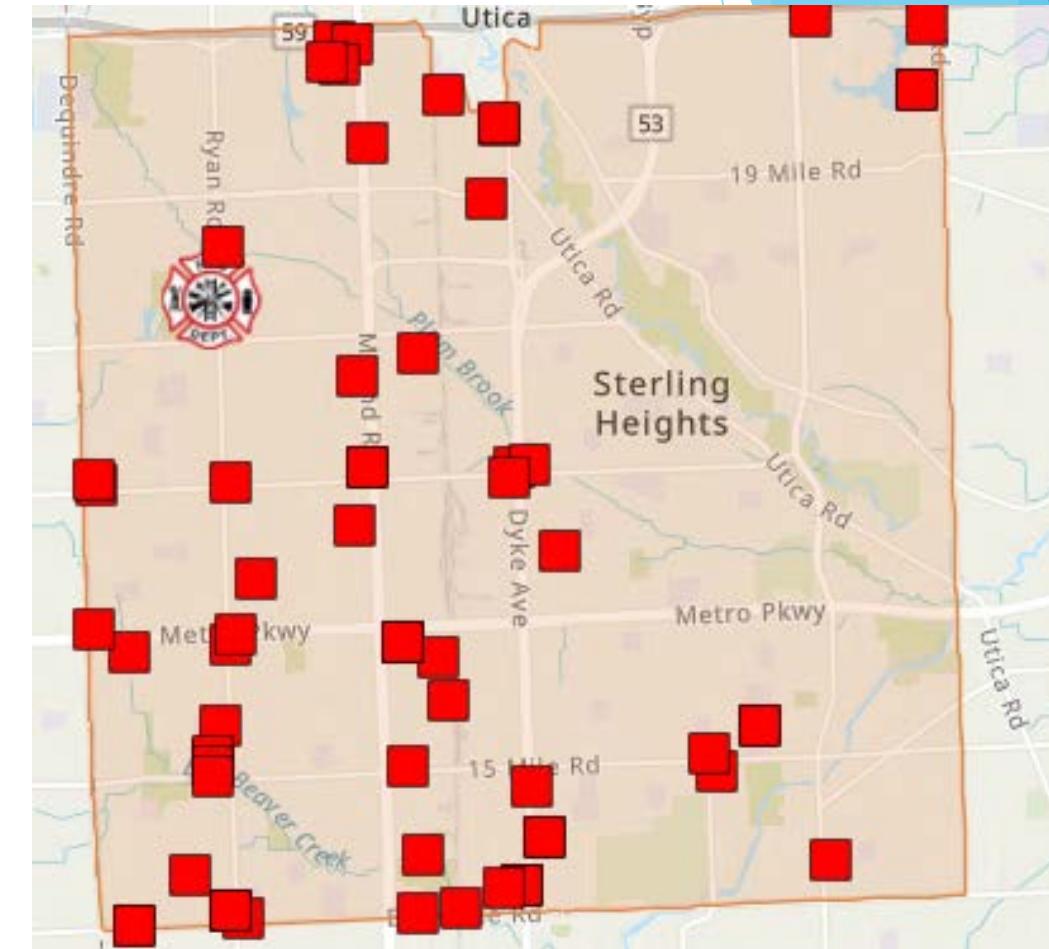
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# Data used to develop Hazard Analysis



IROL  
compliant

43



Critical systems  
address in 2024





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# Dash Boards

### Target Hazard Analysis - Test

**Filter**  
Use the following to filter the dashboard elements to a specific incident type, location, and time.

**Hazard Score Range**  
0 - 100

**Occupancy Type**  
All

**Fire District**  
All

**Target Hazard Analysis**

**Total Hazard Score**

Hazard Score Range	Count
63.1 - 96	~100
53.1 - 63	~200
46.1 - 53	~250
38.1 - 46	~300
26 - 38	~350
Insufficient Data for Scoring	~400

**Buildings with Scores**  
**2,514** of 5,051 to Analyze

**Target Hazard Score: 62.00**

Building Use Description	Industrial
Number of Floors	2
Estimated Building Value	10144800.00
Occupancy Type	Industrial, Utility, Defense, Agriculture, Mining
Occupancy Type Score	15.00
Life Safety Type	Awake and ambulatory not over two stories
Life Safety Score	5.00
Building Height	20.00
Building Height Score	2.00
Building Area	2711387.00
Building Area Score	10.00
Economic Impact	20289600.00
Economic Impact Score	5.00
Fire Flow	903795.67
Fire Flow Score	25.00
Total Hazard Score	62.00
Building Identifier	10-10-16-300-002
Site Address	39000 MOUND RD

Esri, NASA, NGA, USGS, FEMA | Province of Ontario, Esri Canada, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EP,

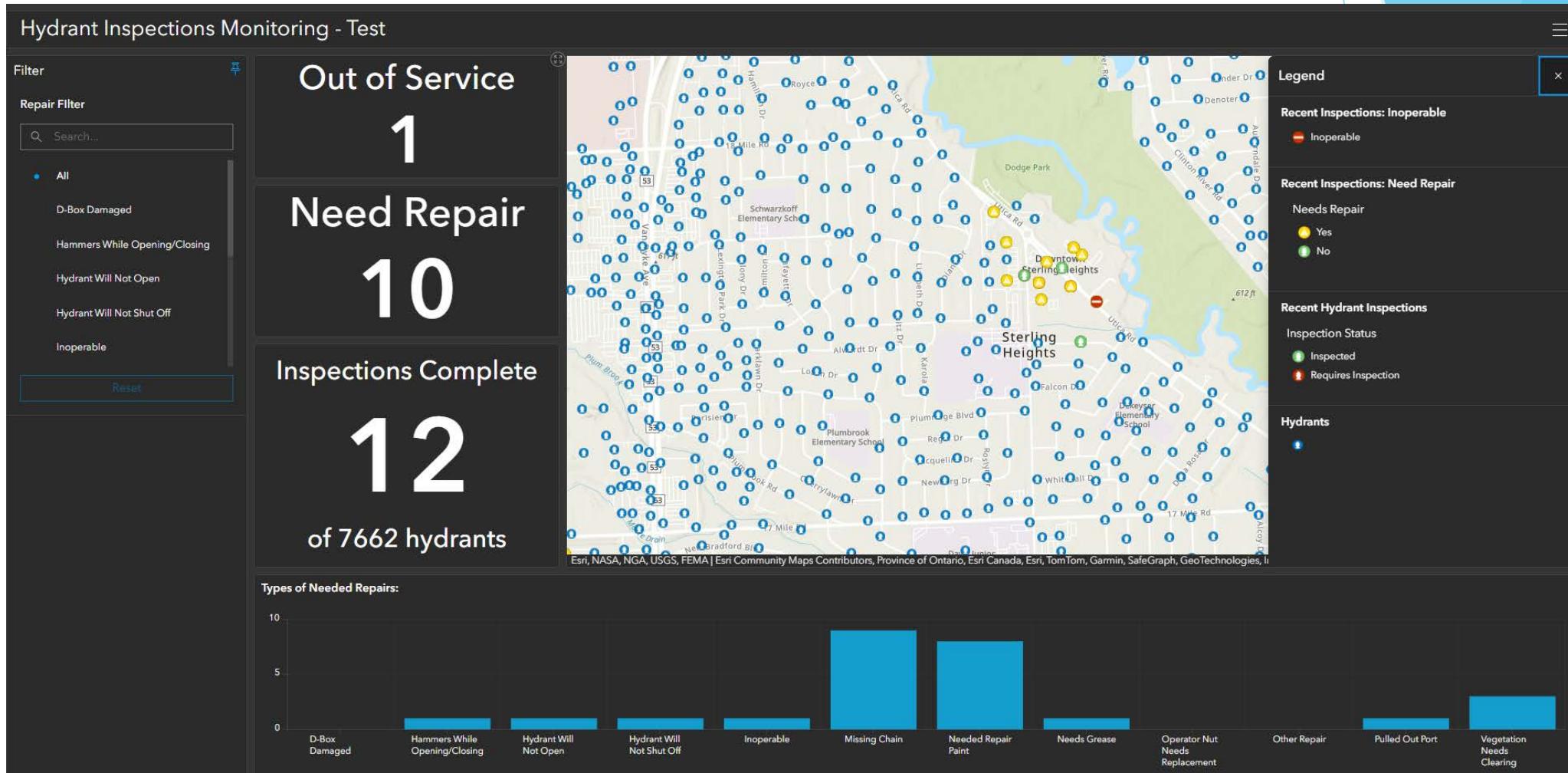


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# ISO improvements



# Notes

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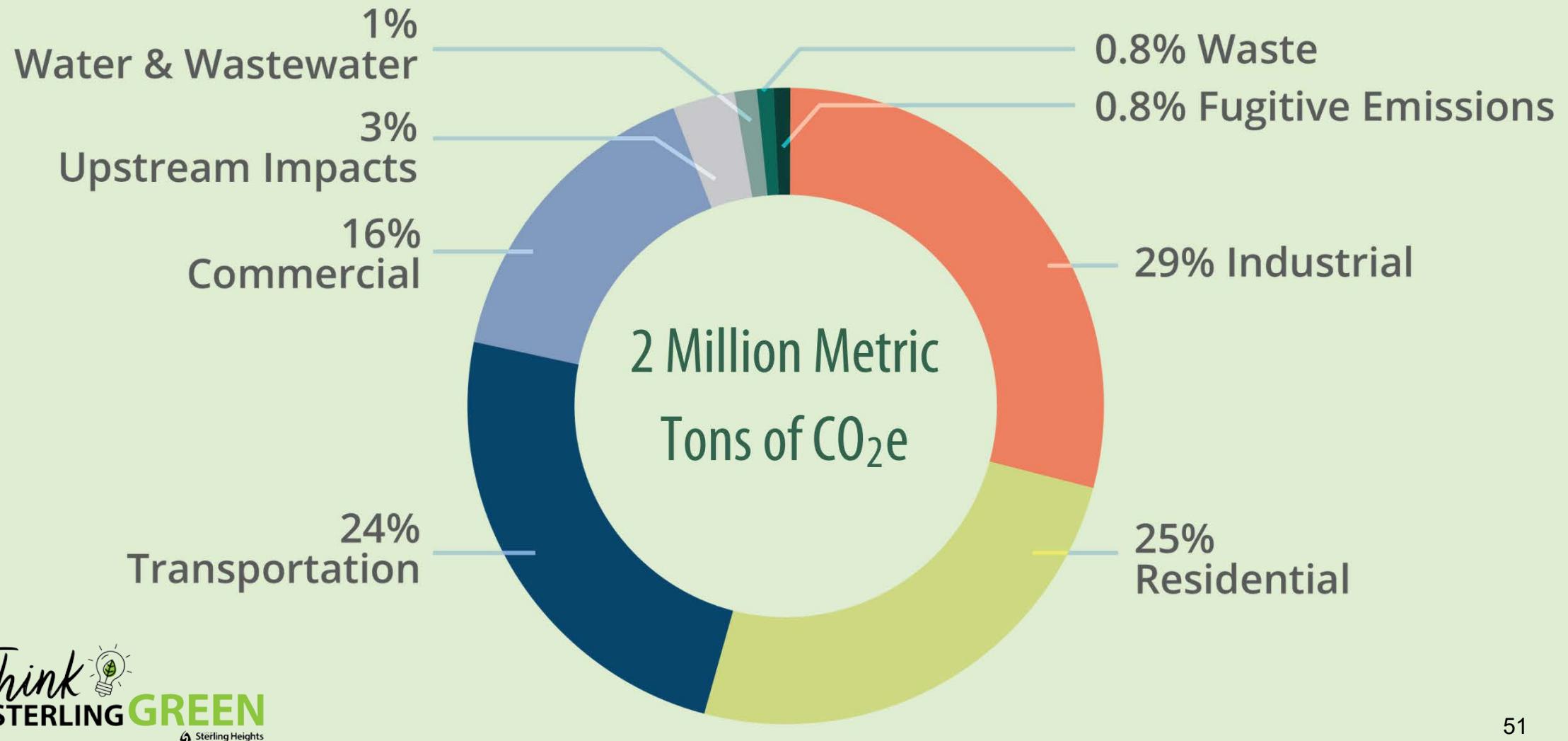
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# STERLING HEIGHTS CLIMATE ACTION PLAN

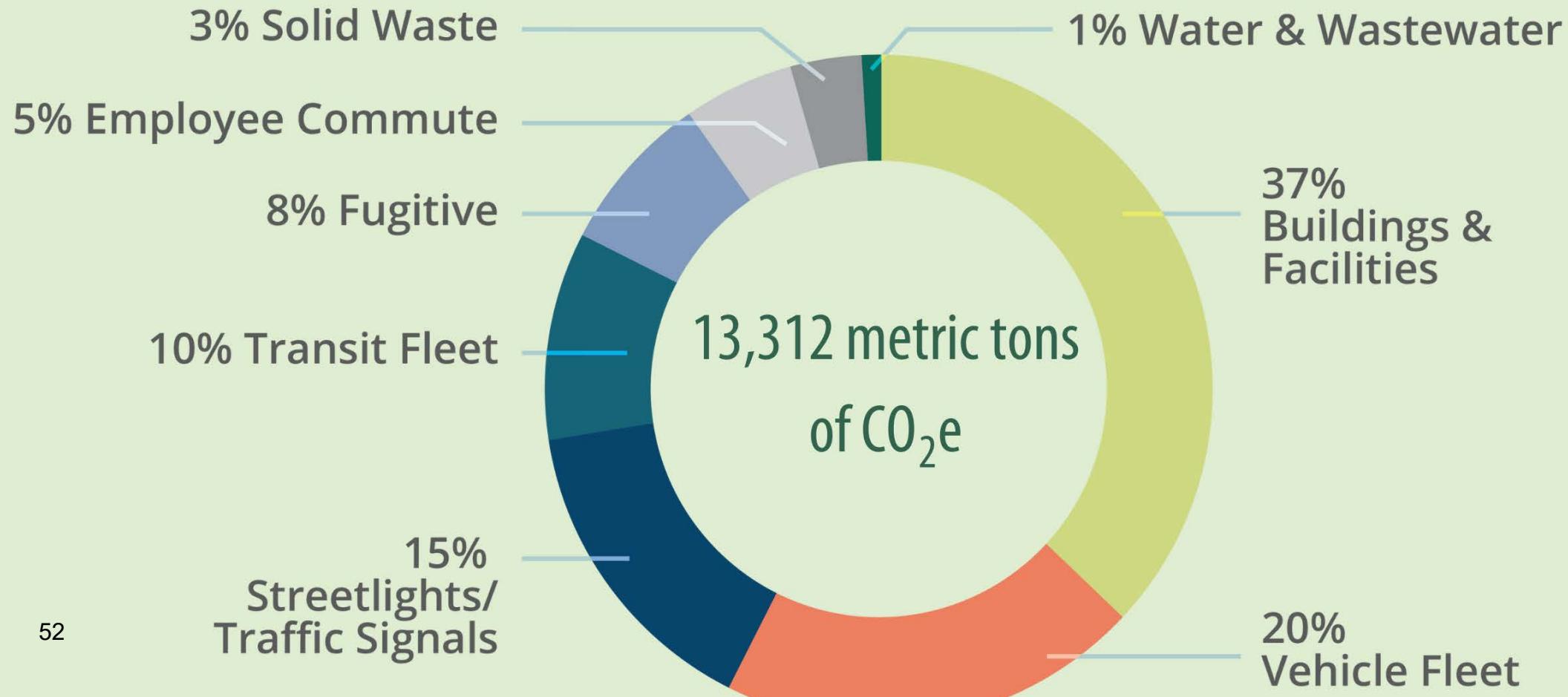
Strategic Planning - January 2025



# COMMUNITY BASELINE



# GOVERNMENT BASELINE

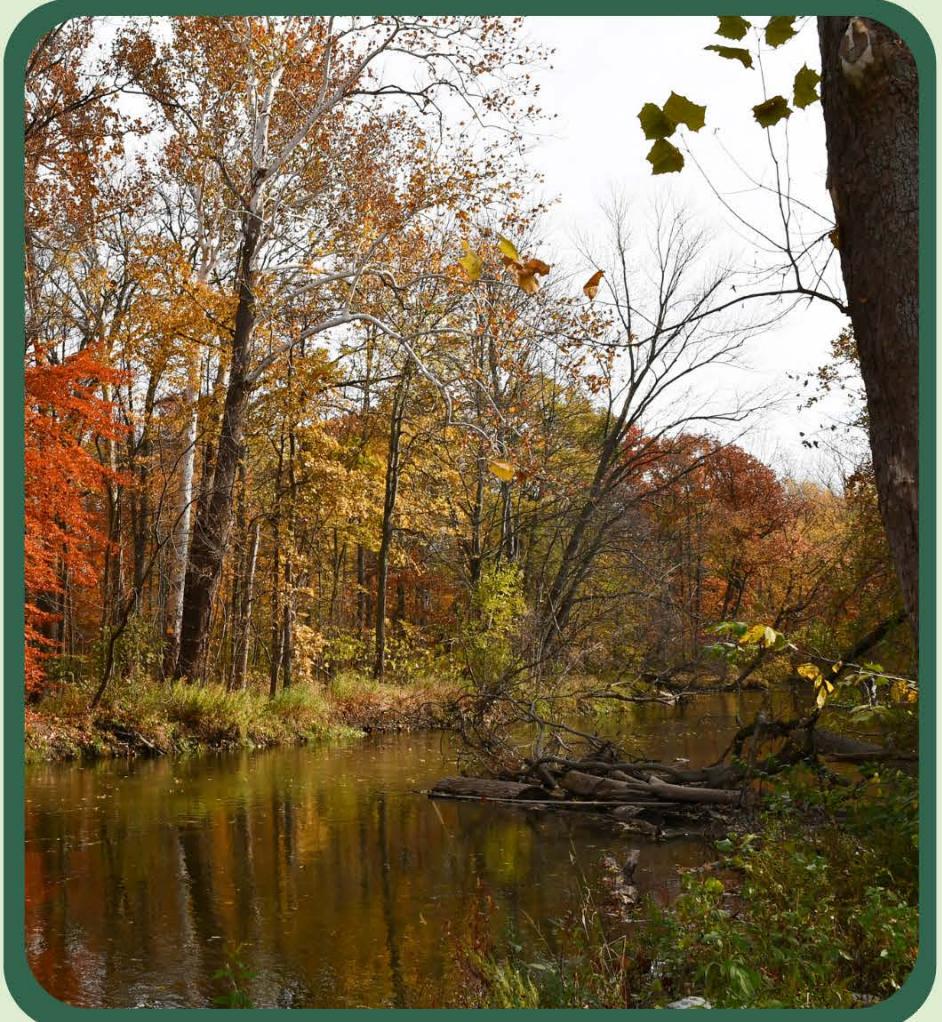


# CAP OBJECTIVES

This CAP establishes a road map for a sustainable future for the City; and lays out goals, strategies, and actions to guide the City of Sterling Heights to net zero greenhouse gas emissions by 2050

The intended outcomes of this Climate Action Plan are as follows:

1. Reduce community-wide and municipal greenhouse gas (GHG) emissions
2. Build community resilience to the impacts of climate change
3. Make Sterling Heights a better place to live and work for all
4. Identify priority actions, estimated impacts, and needed resources for the first five years of plan implementation



# NEED FOR CLIMATE ACTION

Sterling Heights hit hard with flooding after Monday's torrential rainfall



Photo Credit: SHTV

STERLING HEIGHTS: Officials say flooding caused approximately \$62 million in damages



54

Photo Credit: David Guralnick, The Detroit News

- ↑ Warmer summer & winter temperatures
- ↑ Flooding frequency & severity
- ↑ Winter weather event severity
- ↑ High winds & thunder storms

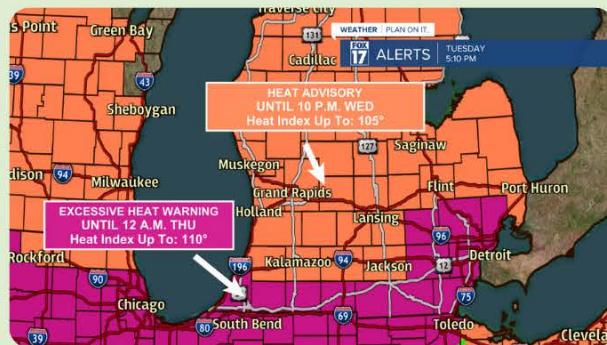


Photo Credit: Fox 17 News, WXMI



Photo Credit: Fox 2 News

**! EMERGENCY ALERTS**  
**Emergency Alert**  
Due to extreme temps Consumers asks everyone to lower their heat to 65 or less through Fri

Photo Credit: Click on Detroit (WDIV)

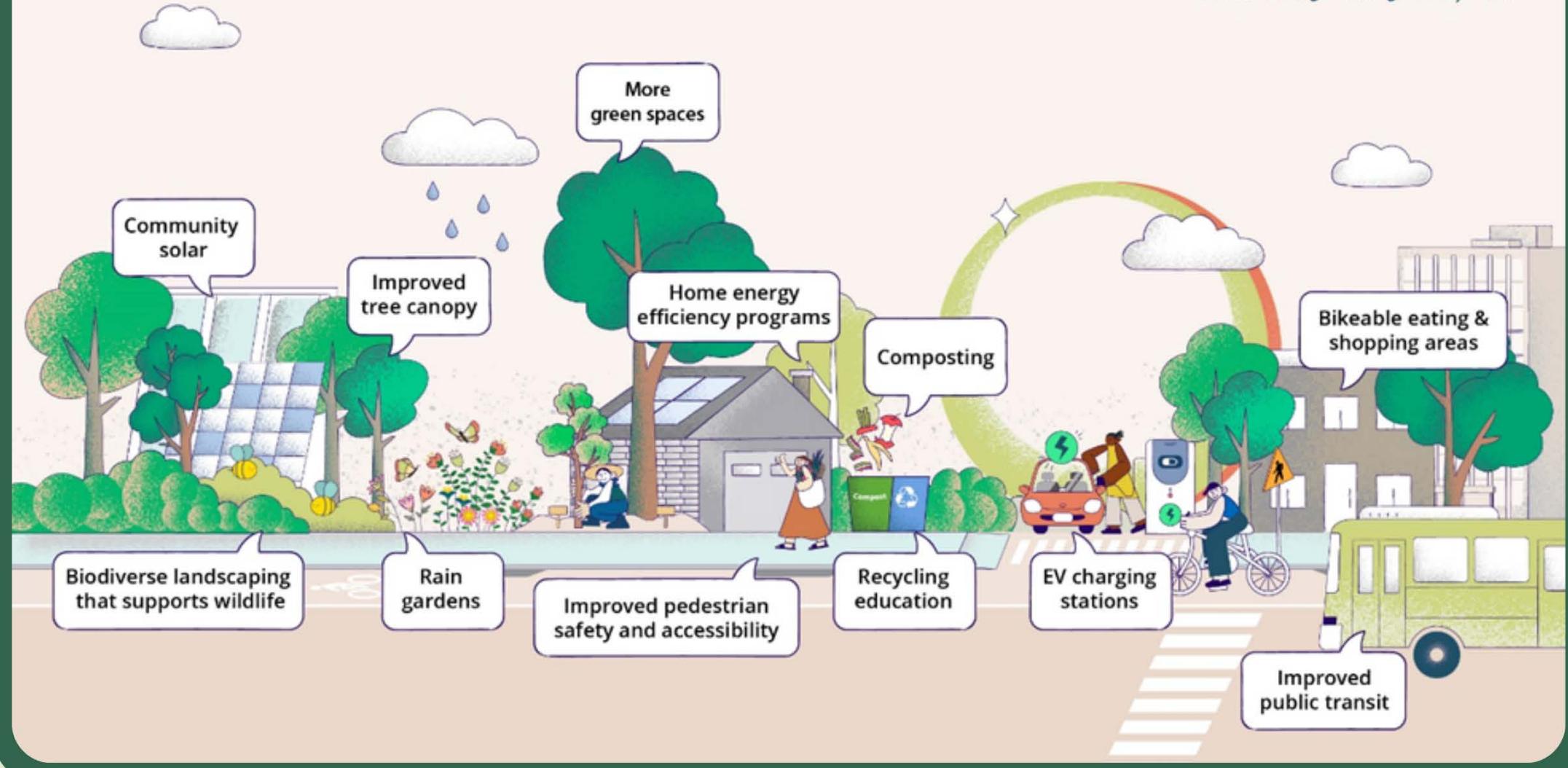
# DOING OUR PART

2023 Emissions per capita in US = 14.3 MT CO<sub>2</sub>e  
2022 Emissions per capita in SH = 15 MT CO<sub>2</sub>e

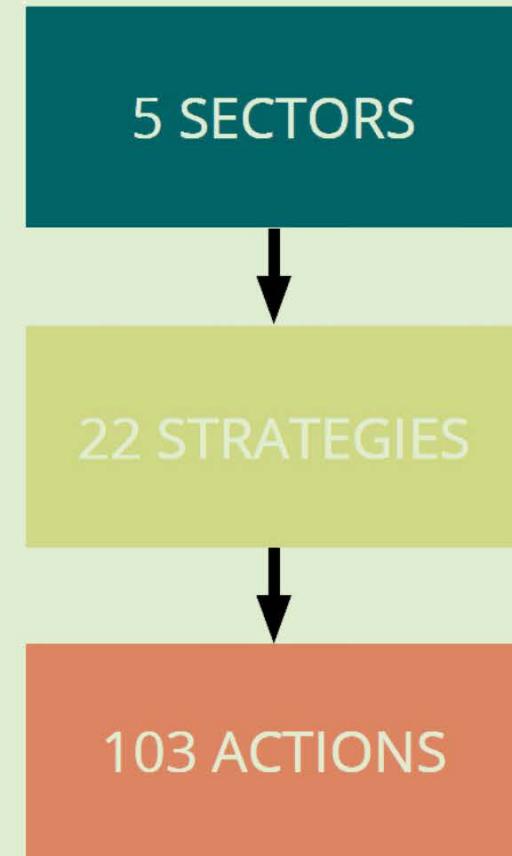


# COMMUNITY VISION

STERLING HEIGHTS, MI



# CAP STRUCTURE

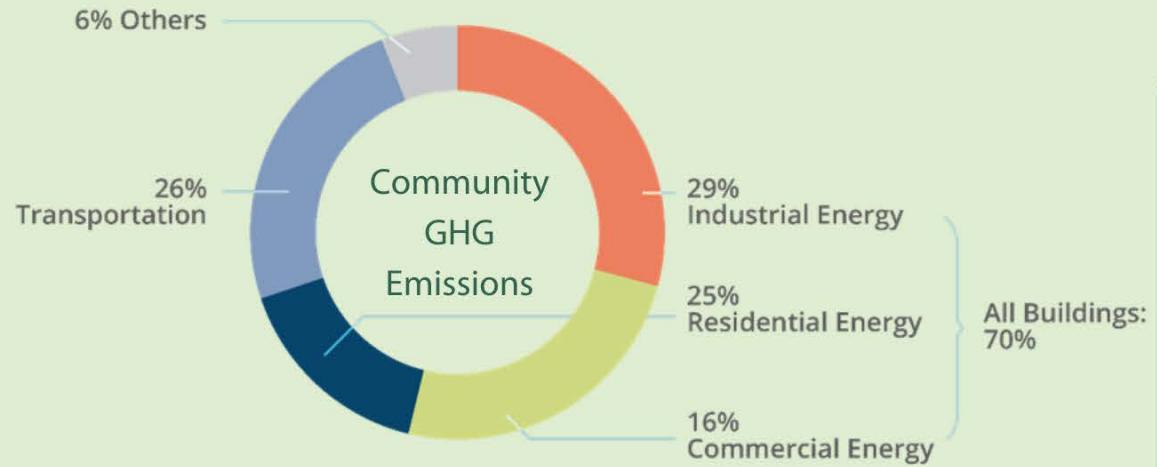


This CAP's content is organized into five sectors, twenty-two strategies, and 103 actions.

## Sectors:

1. Buildings
2. Transportation
3. Waste
4. Public Health
5. Natural Resources

# BUILDINGS SECTOR



Two main priorities:

1. Reduce the amount of energy required to operate the buildings that we live, work, and learn in.
2. Source energy from renewable and sustainable sources.



# BUILDINGS SECTOR

## Strategies:

- Reduce residential energy consumption
- Reduce commercial/industrial energy consumption
- Reduce public sector energy consumption
- Support electrification of all existing and new building stock
- Increase use of renewable energy



## CAP Targets:

Metric	Reduction from 2022 Baseline			
	2030	2035	2040	2050
Municipal GHG Emissions	50%	70%	100%	100%
Residential Building GHG Emissions	35%	60%	85%	100%
Commercial/Industrial GHG Emissions	45%	65%	85%	100%

\*These GHG emissions reduction values assume that grid electricity will reach 50% renewable energy by 2030 and 60% renewables by 2035, in compliance with 2023 Michigan Public Act 235.

# TRANSPORTATION SECTOR

Sterling Heights 2022 Transportation GHG Emissions by Source:



Transportation makes up 26% of baseline GHG emissions community wide

# TRANSPORTATION SECTOR

## Strategies:

- Reduce GHG emissions from vehicles
- Build a strong public transit system
- Improve walkability and bikeability of Sterling Heights
- Reduce GHG emissions from municipal vehicle fleet

## CAP Targets:

Metric	Reduction from 2022 Baseline			
	2030	2035	2040	2050
Vehicle Miles Traveled	2%	5%	10%	30%
Transportation GHG Emissions	10%	35%	50%	100%
Municipal Vehicle Fleet GHG Emissions	15%	30%	60%	100%



# WASTE SECTOR

Though waste makes up less than 1% of community wide GHG emissions & 3% of government emissions, reducing the amount of waste sent to the landfill is an important part of resource stewardship.



# WASTE SECTOR

## Strategies:

- Provide community-wide waste diversion education
- Reduce organic waste community-wide
- Reduce waste from municipal facilities
- Reduce waste at city-run community events

## CAP Targets:

Metric	Reduction from 2022 Baseline			
	2030	2035	2040	2050
Community GHG Emissions from Landfills	10%	20%	40%	80%



# NATURAL RESOURCES SECTOR

Natural resources play a key role in supporting a sustainable, healthy, and vibrant community.

Residents have expressed significant interest in further protecting, enhancing, and increasing the quantity of local parks and natural spaces in Sterling Heights.



# NATURAL RESOURCES SECTOR

## Strategies:

- Increase carbon sequestration potential of public and private lands
- Promote and incentivize the use of native plants to enhance local biodiversity
- Improve city-wide stormwater infrastructure
- Improve natural systems resiliency to current and projected climate conditions
- Improve native landscape connectivity in urban spaces



## CAP Targets:

Metric	2022 Baseline	2030	2035	2040	2050
Percent Tree Canopy Coverage	19%	21%	25%	30%	40%

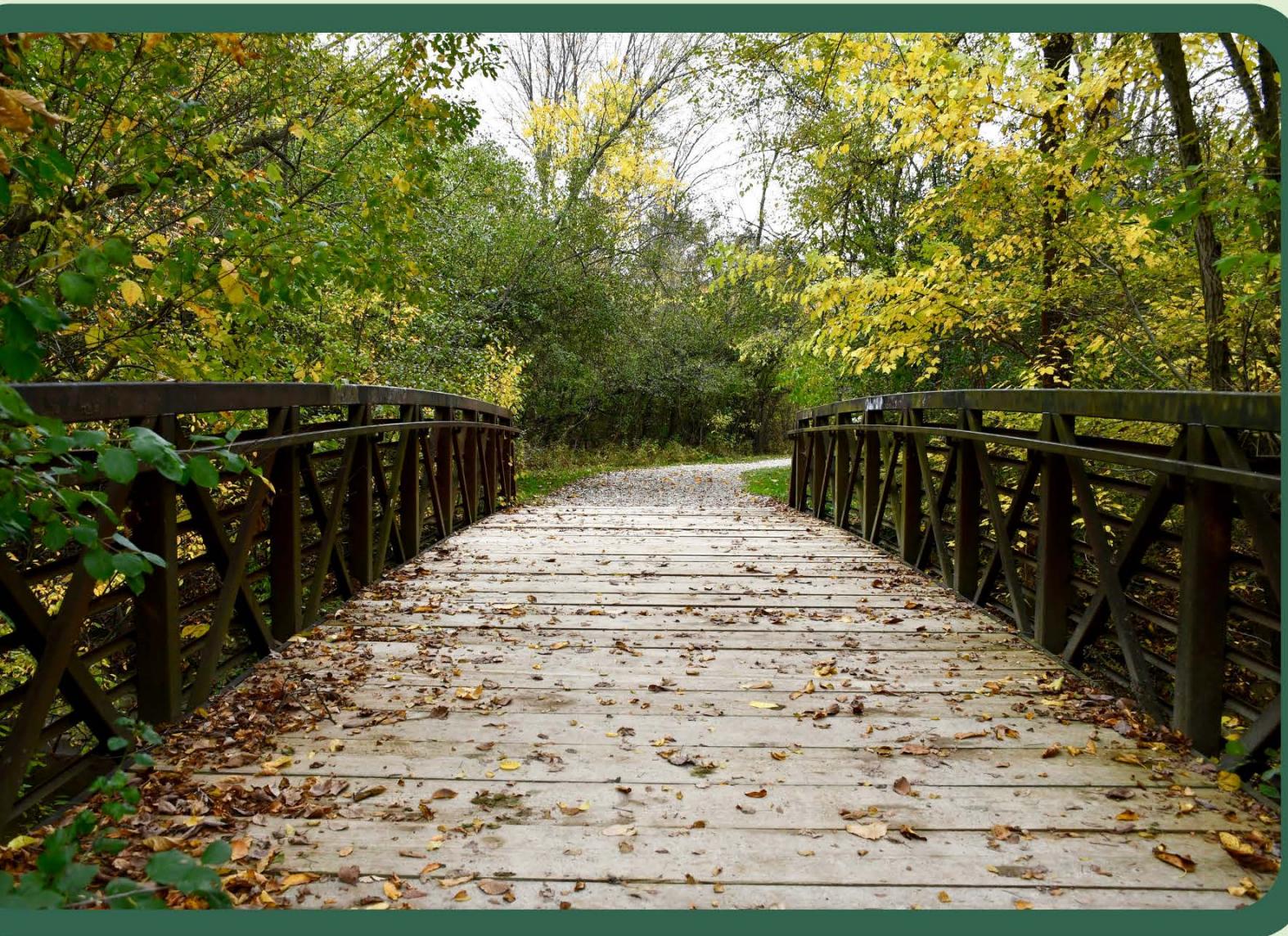


# PUBLIC HEALTH SECTOR



## Strategies:

- Build community resilience to extreme heat and weather events
- Support local food production and urban agriculture
- Strengthen neighborhoods and communities within Sterling Heights
- Reduce use/occurrence of harmful chemicals in Sterling Heights



THANK YOU!

Think  
STERLING  
GREEN  
Sterling Heights

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# Electronic Waste Recycling

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Think  
STERLING  
GREEN

Sterling Heights

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# RECYCLE

RECICLE

THANK YOU FOR RECYCLING THESE:  
GRACIAS POR RECICLAR ESTOS MATERIALES:

## Paper Papel



Paper and Cartons  
(empty and clean)

## Cardboard Cartón



Cardboard  
(flatten)

## Metal Metal



Aluminum Cans, Steel Cans,  
and Foil Trays

## Plastic Plástico



Bottles, Jars and Jugs  
(empty and dry)

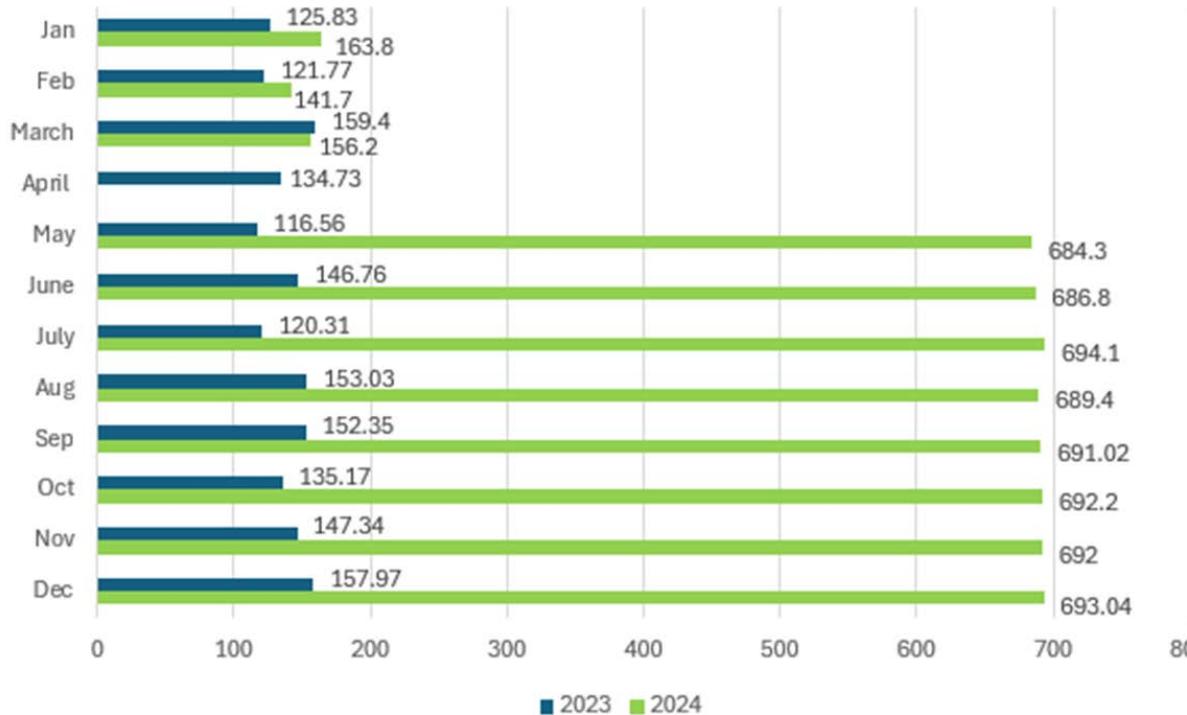
## Glass Vidrio



Bottles and Jars  
(empty and dry)

# Universal Curbside Recycling

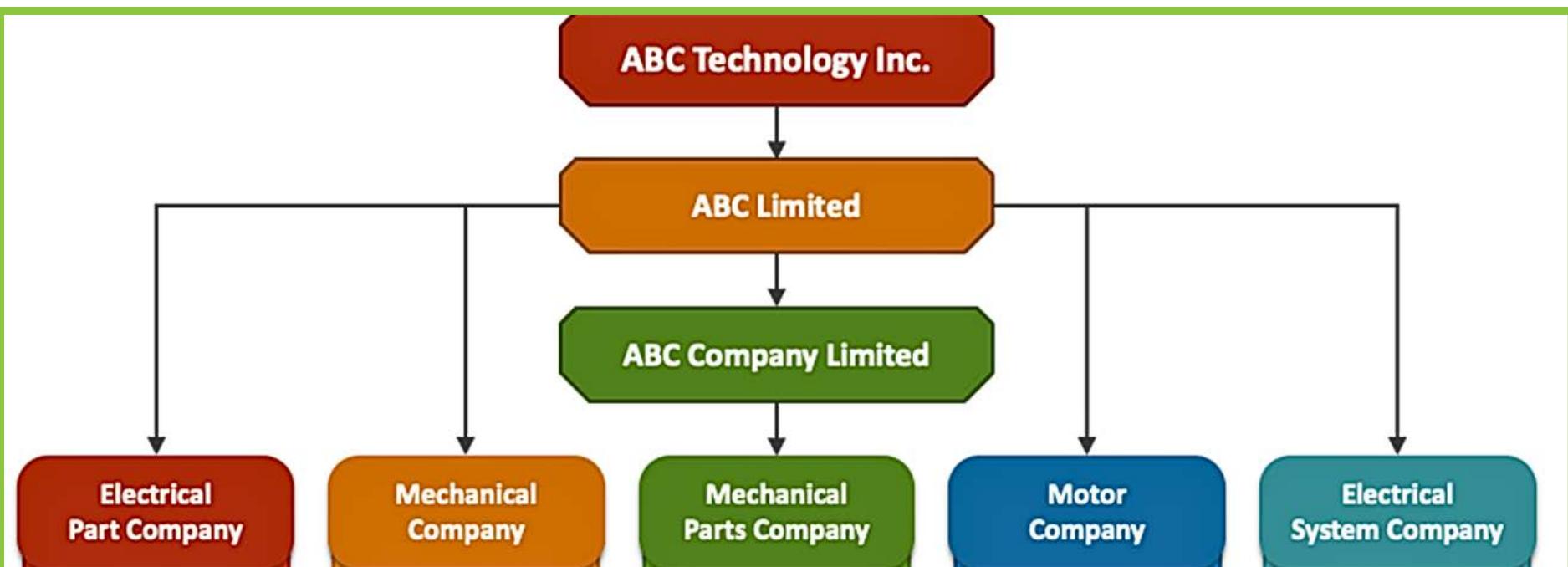
RECYCLING TONNAGE 2023 - 2024



# Spring Events



# Spring Events

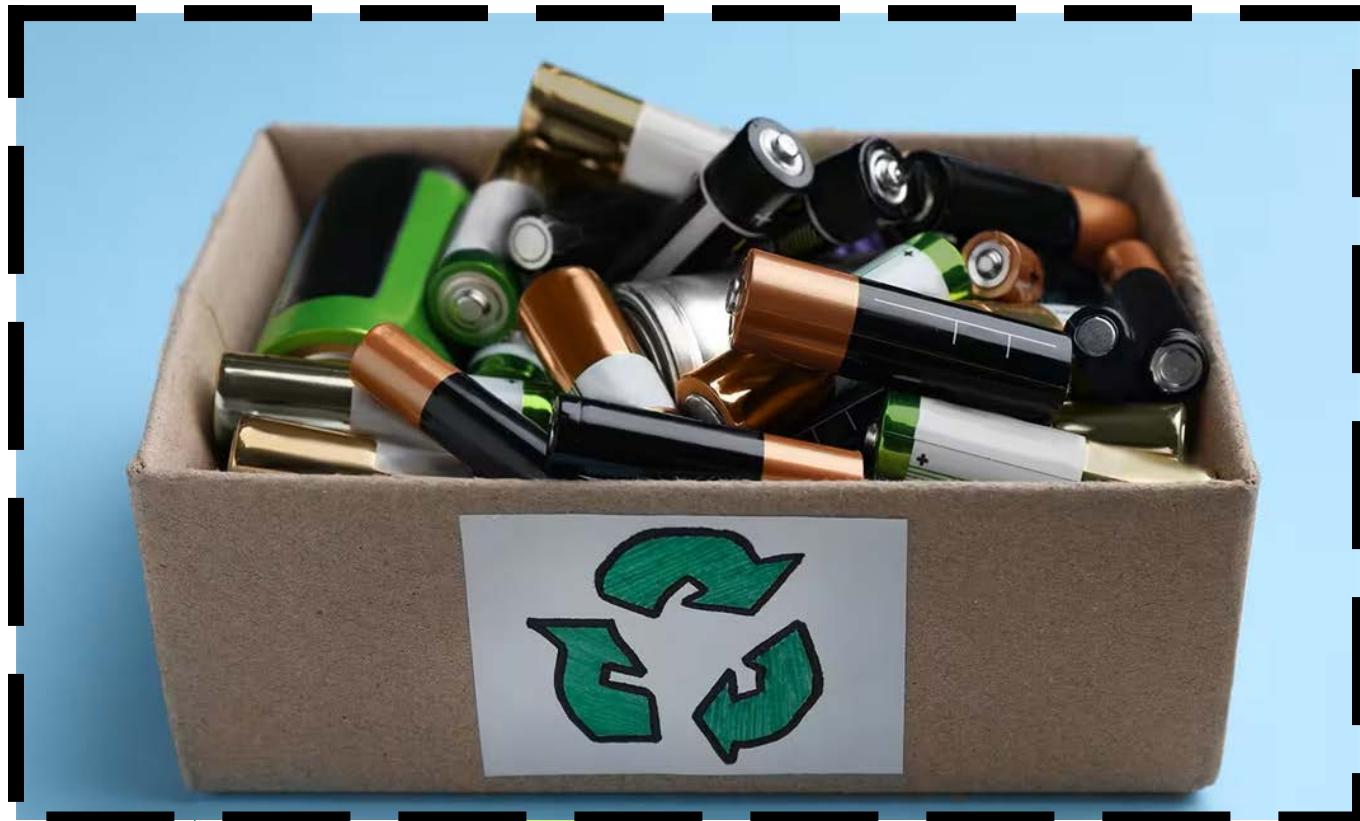


# Spring Events

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# Recycling Single Use Batteries



# Recycling Rechargeable Batteries



# Electronic Recycling Options



# Electronic Recycling Options



# Electronic Recycling Options



# Thank You!



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# Stormwater

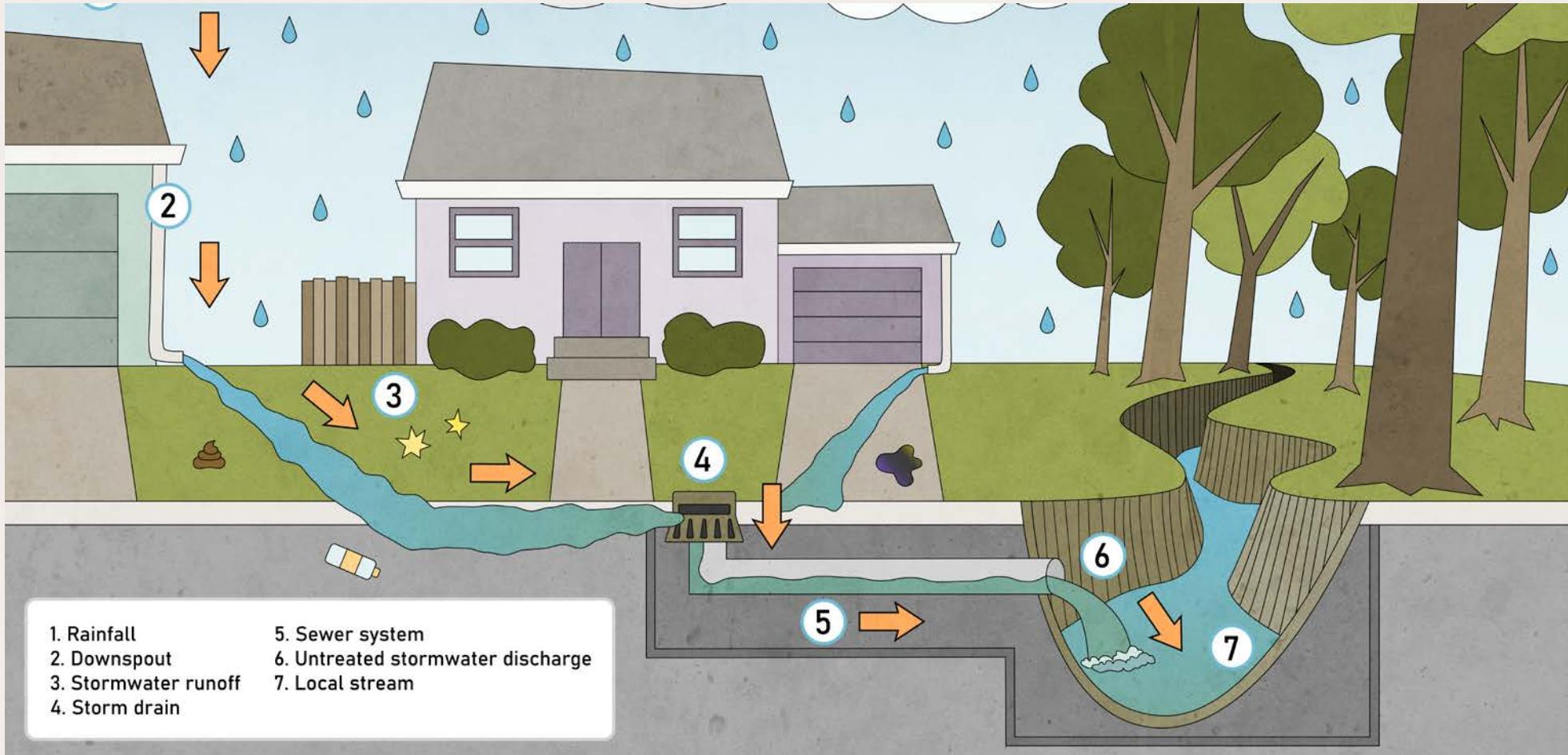
# What is a Stormwater System?

Excess rainwater or melted snow that flows over surfaces in urban areas when it cannot be absorbed into the ground.

1. Impacts
2. Water Quality
3. Management Systems
4. Regulations



# What is a Stormwater System?





# Stormwater Management

# What do we currently do with Stormwater Management?

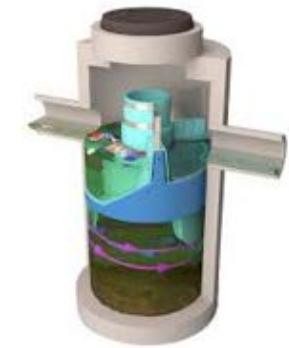
- Water Quality Control ✓
- Water Volume Control
- Water Rate Control

## Water Quality Devices

Sediment bays



Mechanical Separators



Wet Detention Ponds



# What do we currently do with Stormwater Management?

- Water Quality Control
- Water Volume Control ✓
- Water Rate Control

## Volume Control Devices

Bio-Swales



Grass Pavers



Rain Gardens



Grass Swales



# What do we currently do with Stormwater Management?

- Water Quality Control
- Water Volume Control
- Water Rate Control ✓

## Rate Control Devices

Underground  
Detention Systems



Dry Detention Basins

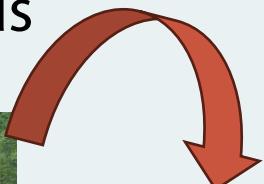


Wet Detention Basins



# Developments over 1 acre

Yatooma Oil/Retail Campus  
19 Mile Road & Mound Road



Underground Retention System,  
Bio-Retention Basins, and  
Mechanical Water Quality Device

Mound & Bridgewood  
Industrial Buildings



Bio-Retention Basin

# Public Infrastructure Projects

## Innovate Mound



9 Bio-Swales

# Stormwater System Costs



# Stormwater System Cost Examples

- Retention Pond Fence Replacement & Repair
- Retention Pond Maintenance
- Catch Basin Maintenance & Repair
- Pipeline Repair & Replacement
- Stormwater reduction methods, i.e. bioswales





# Stormwater Utility

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# What is a Stormwater Utility?

- Separate entity that manages stormwater runoff and provides services such as planning, engineering and maintenance
- Similar to a Water and Sewer Utility
- A separate user fee would be charged to fund the utility
- Usually charges to property owners based on the amount of impervious surface on their property

# Stormwater Utility Development Process

1. Initial Data Gathering – Calculate impervious surface area for each property
2. Develop Stormwater Fee and Credit Program
  - a) Calculate cost of stormwater program
    - i. Operation & Maintenance
    - ii. Main replacement plan
    - iii. Administration
  - b) Determine credits for stormwater management practices
    - i. Rain barrels, retention ponds, etc.
    - ii. Establish approval process
3. Stormwater Ordinance Development
4. Develop Data Management & Billing Process
5. Public Outreach Plan

# Pros & Cons of a Storm Water Utility

## PROS

- More equitable way to recover costs
- More transparent
- Encourages minimization of stormwater impacts
- Could offset w/ reduction in property taxes
- Dedicated funding source for infrastructure improvements

## CONS

- Data/labor intensive to establish
- Costly to establish (\$300K - \$400K)
- Greater potential for litigation
- May cause resident confusion/resentment
- Ongoing costs for administration

# Example Communities

- St. Clair Shores
- Royal Oak
- Birmingham
- Ann Arbor
- Detroit
- Jackson
- Marquette
- Oak Park
- Chelsea
- Roseville

### Single-Family and Two-Family Residential

Tier #	Measured impervious area	Representative Impervious Area Midpoint of Tier listed on the Water Utilities Bill	Quarterly Charge*
Tier 1	Up to 2,187 square feet	0.03706 acres	\$36.92
Tier 2	> 2,187 to 4,175 square feet	0.06486 acres	\$64.59
Tier 3	> 4,175 to 7,110 square feet	0.11117 acres	\$110.71
Tier 4	> 7,110 square feet	0.19456 acres	\$193.78

## Ann Arbor Fee Example

\*Plus a \$4.49 customer service charge per quarter.

Commercial and other properties (e.g., multi-family, office, institutional, and industrial land uses) are billed directly on the impervious areas at a rate of \$995.97 per acre per quarter, plus a \$4.49 customer charge per quarter.

# Legal Hurdles to Stormwater Utility



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- There is no State law prescribing a method for funding stormwater management utilities.
- Local governments' efforts have been challenged due to the 1998 Michigan Supreme Court ruling *Bolt v. City of Lansing*.
- Stormwater service fees would be lawful if they were for a regulatory purpose, proportionate to the cost of managing the water, and voluntary.
- Senate Bill 660 sought to establish a framework for municipalities to create a Stormwater Utility Ordinance that may satisfy the Supreme Court's concerns raised in Bolt.
- Further challenges are expected, even if Senate Bill 660 is adopted.

# Initial Budget Implications



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**HMA**

# **STERLING HEIGHTS COMMUNITY MENTAL WELLNESS STRATEGIC PLAN**

**PRESENTED BY:  
BRIANA JACOB**

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# Summary

The needs assessment report for the City of Sterling Heights provides an analysis of the community's behavioral health landscape, encompassing substance use disorders (SUD), mental health conditions, and intellectual and developmental disabilities (I/DD).

This comprehensive assessment addressed several key areas of concern for the city, including mental health cases, disparities, challenges for vulnerable populations, homelessness, hoarding, public educational needs, substance use, social determinants of mental health, and the impacts of COVID-19.





## ***Sterling Heights Stats***

- 64% speak *only* English at home, meaning 36% are bilingual.
- 13.1% of the Sterling Heights population reported having disabilities
- 19.1% of Macomb County adults (ages 18 years and older) reported fair or poor mental health in the past 30 days (2022).
- According to the CSH Community Survey, 14% of respondents (n=17) identified hoarding disorder as one of the top three most urgent mental health issues affecting the community.
- More than one-quarter of the residents (27%) said they do not have access to healthy and affordable food. 14.4% of households received SNAP benefits.
- 13% of Sterling Heights residents reported poor physical health for 14 or more days in the past 30 days.
- The City of Sterling Heights Community Survey revealed that 40% of respondents (n=96) identified "stigma associated with seeking treatment" as the most significant barrier to accessing substance use, I/DD, and mental health services.



## IMPORTANCE OF MENTAL WELLNESS

Mental health problems are the single largest cause of disabilities in the world.

Poor mental health or mental illness increases the risk for many chronic physical health conditions.

The presence of chronic conditions can increase the risk for poor mental health or mental illness, too.

Suicide is the **second** leading cause of death of residents ages 15-34 in Michigan.

Some known suicide risk factors, include:

- Family history of child abuse/neglect
- Previous suicide attempt(s)
- Knowing someone who died by suicide, particularly a family member
- History of mental disorders
- Misuse and abuse of alcohol or other drugs
- Hopelessness
- Cultural and religious beliefs (e.g., belief that suicide is a noble resolution of a personal dilemma)
- Social isolation
- Barriers to accessing mental health services
- Stressful event with a theme of loss (relational, social, work, or financial)
- Chronic disease or acute medical illness/injury and disability
- Easy access to lethal methods
- Stigma



ISSUE(S)
Lack of Crisis Stabilization Services.
Shortage of Outpatient Services. Exacerbated by workforce shortages in city, county, state.
Desire for Peer Support Services.
Desire for more behavioral health crisis training for first responders.
First responder need for social services support on runs.
Growing number of unsheltered population. Lack of shelters in community.
Increase in the mental health issue acuity within community
Rising substance abuse and overdose cases
Transportation barriers exist within community – which can impact access to services, employment and income, etc.
Stigma around mental health and lack of knowledge about available resources exists within community. Language barriers in City may exacerbate issue.
Fragmented service delivery system – lack of care coordination, lack of information sharing, gaps in level of care availability.
Lack of a centralized repository of resources for mental health, substance use disorder, housing, transportation, food support, etc.



# Great Things Are Happening in Sterling Heights!

Strong commitment to the community.



City awareness of mental health and substance use issues within community.



Dedication to improving the lives of residents with proactive initiatives and programs.



Forward and innovative thinking and a willingness to stand up new programs.



Community, local government, and business appear invested in progress and excellence.

## Development of multiple innovative initiatives:

- ✓ Come Back Quick Response Team
- ✓ FAN/Hope Not Handcuffs partnership
- ✓ Naxolone Leave Behind Program
- ✓ Overdose runs
- ✓ Social support embedded in first responder calls
- ✓ 2<sup>nd</sup> chance program
- ✓ Drug Free Coalition



# Proposed Goals And Strategies

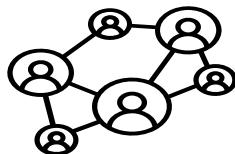


# Social Determinants of Health

Objective 1: All residents in Sterling Heights live and work in a safe environment and have access to stable, safe, affordable housing, transportation, education, and essential resources.

Objective 2: Ensure that the City of Sterling Heights creates and supports opportunities and programs that foster wellness and resiliency.

## Strategies



1. Build upon and create priority population-led community solutions for housing, social services, public health, and health care to address system bias and inequities.



2. Support and expand community initiatives and opportunities that foster greater understanding and application of cultural awareness and address systemic bias and inequities.



3. Advocate for, and invest in, convenient and affordable transportation options for residents in need of transportation.

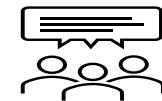
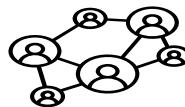
# Mental Health & Substance Use Disorder

Objective 1: Advocate and support accessible and culturally aware behavioral health and substance use disorder in multiple locations throughout the city.

Objective 2: Reduce stigma and increase community awareness of mental health and substance use services and illnesses.

Objective 3: Create and support suicide and overdose prevention programs within the community.

## Strategies



1. Increase availability of low-barrier treatment programs designed to improve access to mental health and substance use services.

2. Promote and invest in behavioral health workforce development initiatives to increase the number of community-based providers, with a particular focus on increasing representation from underrepresented populations in Sterling Heights.

3. Establish and maintain an online community directory of behavioral health and substance use disorder providers. Potential to partner with community, county, and state agencies to build and maintain.

4. Promote community education on mental wellness and harm reduction strategies to reduce bias and improve awareness.

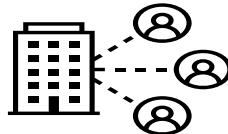
5. Support and invest in having consistent social service resources available to first responders to aid them in responding to calls.

# Healthy Lifestyles

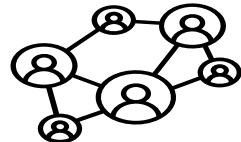
Objective 1: Ensure that Sterling Heights residents have access to nutritious, affordable food in alignment with dietary and cultural needs.

Objective 2: Fostering safe, strength-focused environments for residents, families, and children that support wellness and provide a sense of community.

## Strategies



1. Promote school and community-based partnerships designed to meet the needs of children, youth, and families.



2. Support parental and resident outreach and education initiatives, such as workshops and school-based resource fairs.

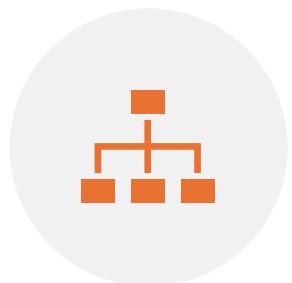


3. Support worksite programs, including informational, educational, and social strategies, along with policy and environmental approaches, to improve health-related behaviors and outcomes.



4. Partner and support to co-locate mobile food pantry or other services in areas identified as at risk for food scarcity.

# What's the City's Role?



Promoter



Facilitator

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Convener



Investor

# Collective Impact



# What might success look like?

- Increased Access to, and awareness of, mental health services and resources
- Reduced Stigma
- Reduce negative outcomes from mental health/SUD illnesses
- Increased quantity and strength of Collaborative Partnerships & Programs
- Development of a Mental Health <sup>125</sup>workforce development program



# Mental Health “Next Steps”

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Key Insights and Strategies



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Heights**

Innovating  
Living



# Many Pieces to the Puzzle

- Case Workers
- Safe Home Task Force
- SH Drug Free Coalition
- Comeback Quick Response Team
- Redirect Jail Diversion
- FD Mobile Integrated Health



- Crisis Intervention Training
- Peer Support Teams
- Local non-profits (FAN, CCF, ACCESS, Samaritas)
- MCCMH
- MDHHS
- Local Schools

# “Sterling Wellness” Initiative

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Focus on improving mental health services, accessibility, and connection



Leadership support citywide in partnership with our Mental Health Case Workers



Continued community outreach and development of a Sterling Wellness App/website for centralized resources

# Targeted Programs

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- ✓ Hoarding/Safe Homes Task Force
- ✓ Homelessness/Housing
- ✓ Insurance obstacles
- ✓ Socio-economic barriers
- ✓ Immigrant support
- ✓ Substance Use Disorder
- ✓ Juvenile mental health



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Living

# WHATS NEXT?



Crisis Teams: Co-responder response units

Community Collaboration: State, county and non-profit partners, city groups  
(Clergy forum, Ethnic Community Committee, Youth Advisory Board, Housing  
Commission)

Digital Tools: 988, teletherapy, apps, and AI chatbots

Literacy Campaigns: Awareness, training programs, and reducing stigma



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# Continued Strategies



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**Schools: In-school counseling  
and peer support in partnership  
with SRO's and Youth Bureau.**

**Connections: Finding the right  
resources at the right time.**

**Holistic Community Wellness:  
Green spaces, communal areas,  
parks, trails. "Shinrin-yoku"**

**Workforce Support: Employer  
mental health programs and  
EAP's.**

# Thank You

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# PPP PROJECT UPDATE



BEFORE



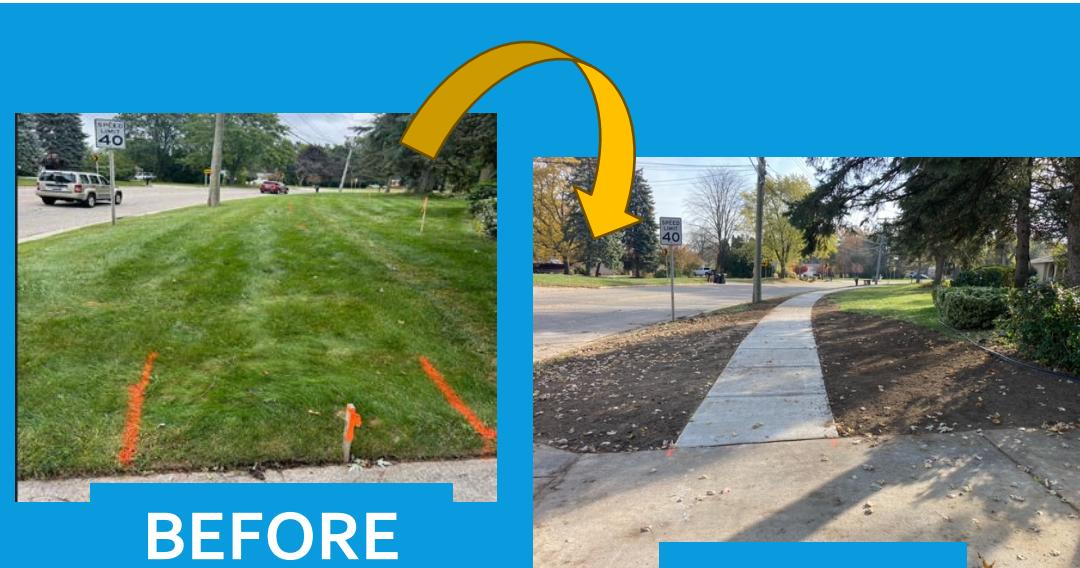
## SIDEWALKS



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# PRIORITY SIDEWALK GAP (EST. 2020)

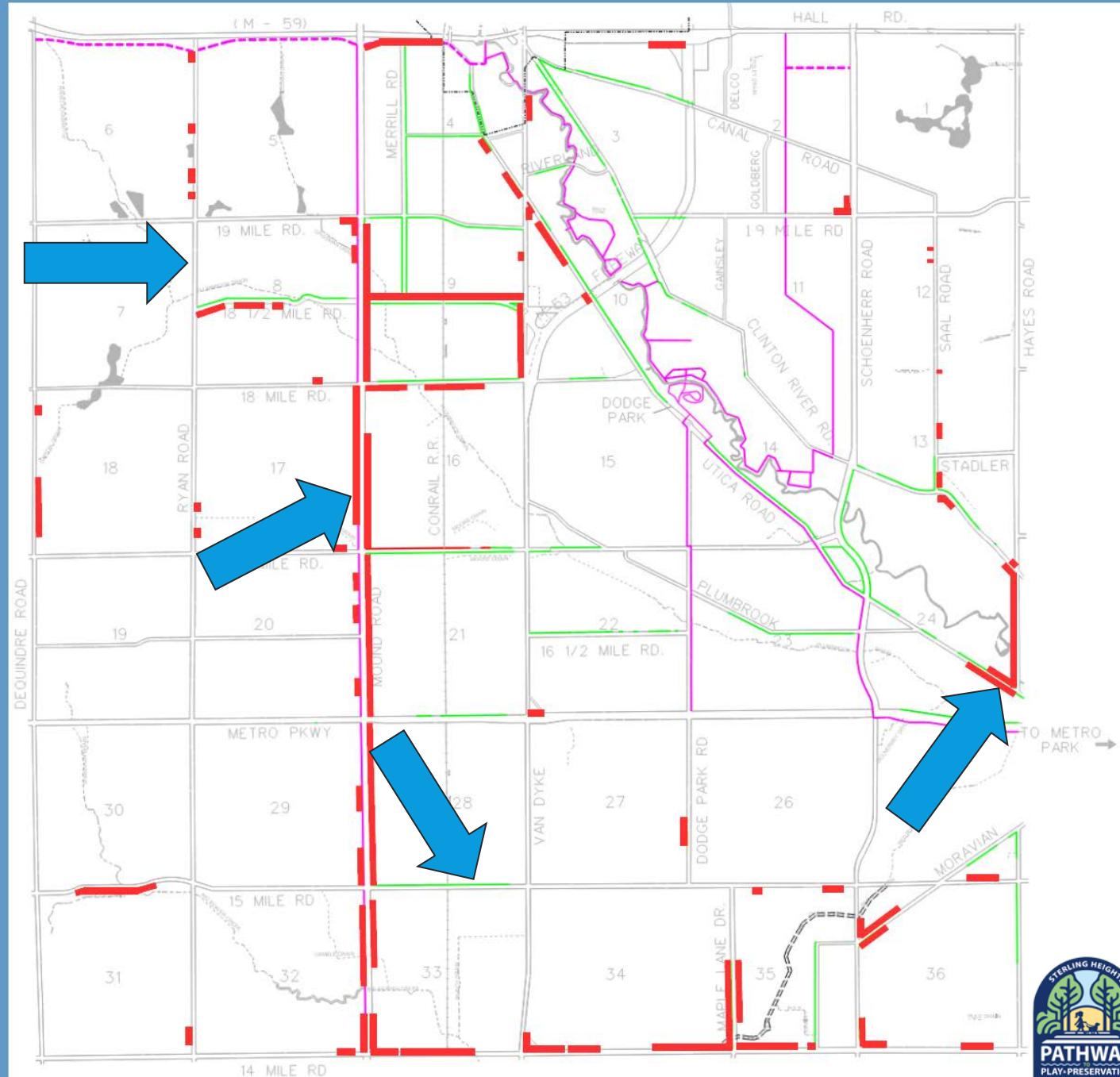


BEFORE

AFTER

## Map Legend

- Priority Sidewalk Gaps
- Existing Sidewalk Gaps
- Existing Trail System
- Future Trail Connection



# GAP COMPLETION SINCE 2020

## Map Legend

- Sidewalk Gaps Completed
- Dobry Trail to be completed early 2025
- DTE Trail Connection to be completed early 2025

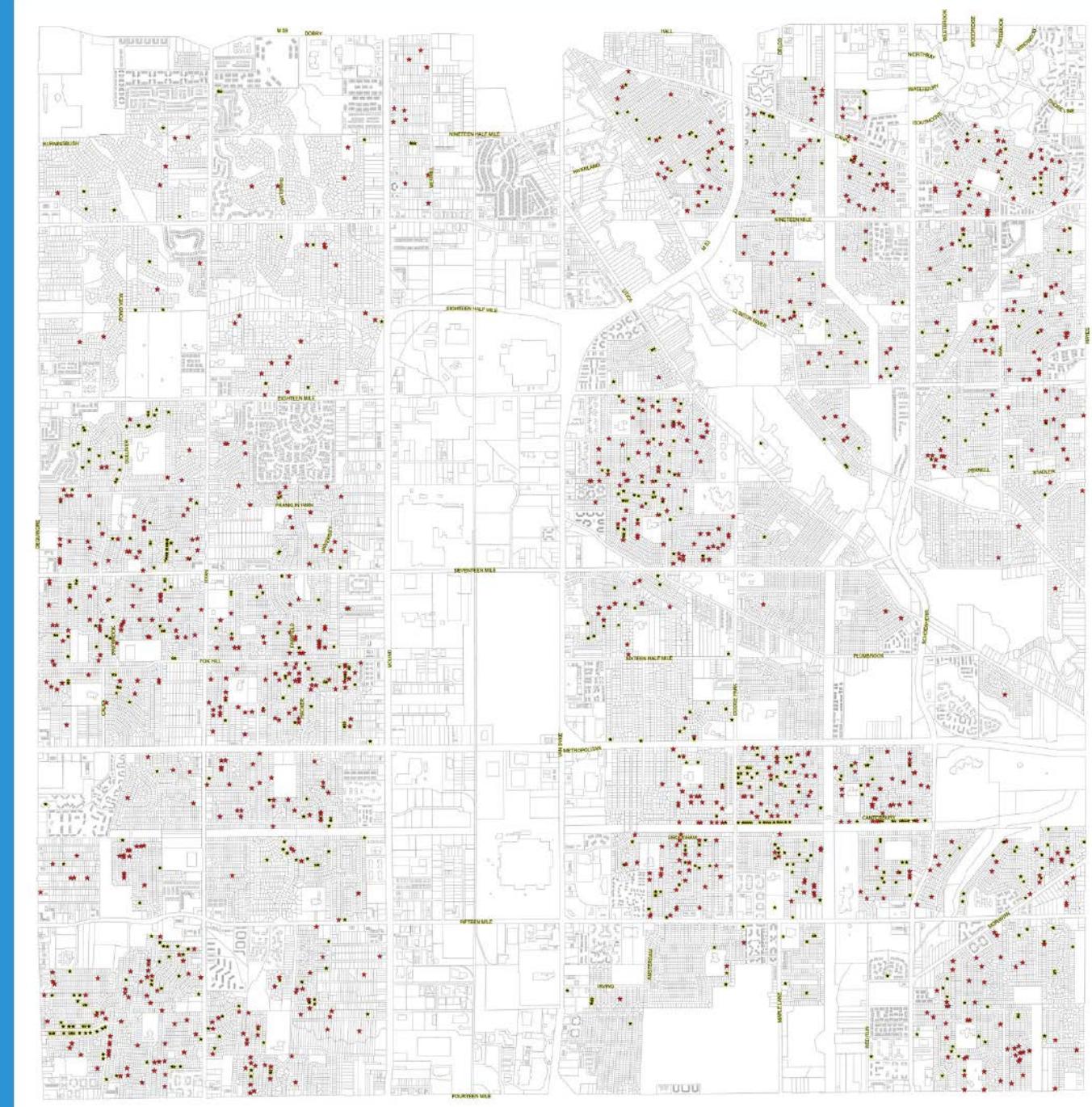
## Open Sidewalk Gap Requests

- Ryan Road - 19 Mile to Dobry Drive
- 18 Mile Road - West of Mound Road
- 18 1/2 Mile Road - Ryan Rd to Mound Rd
- Dodge Park Road - 15 Mile to Metro Parkway
- 14 Mile Road - Schoenherr Rd to Hayes Road





# SIDEWALK REPLACEMENT





# SIDEWALK REPLACEMENT





# SIDEWALK GAP

2025

- 14 Mile  
Schoenherr Rd - Hayes Rd
- Dodge Park Road  
15 Mile Rd - Metropolitan Parkway

2026

- 18 1/2 Mile Road  
Ryan Rd - Mound Rd
- Hayes Road  
Clinton River Rd - Utica Rd / Park
- Utica Road  
West of Hayes Rd

2027

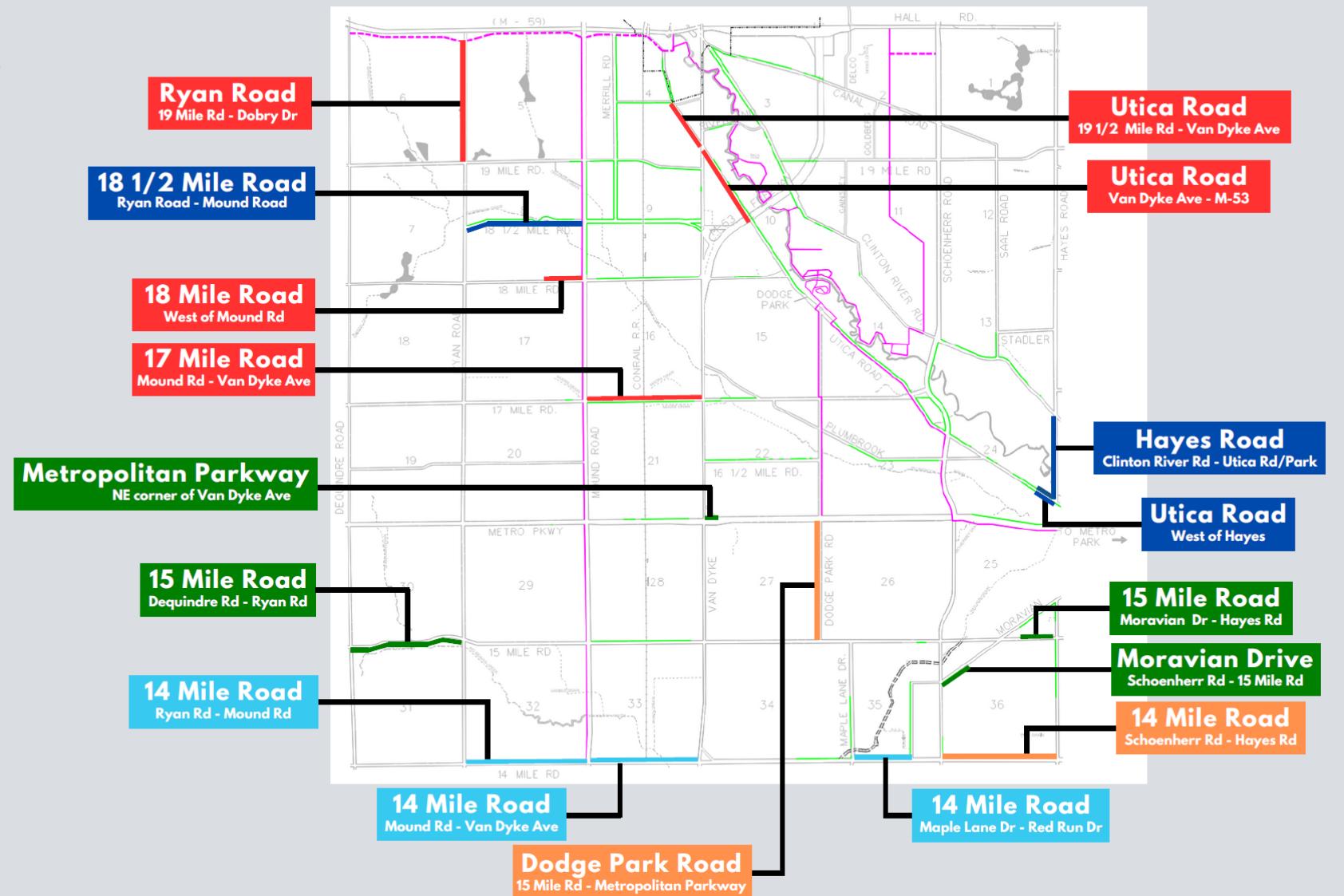
- 18 Mile Road  
West of Mound Rd
- Ryan Road  
19 Mile Rd - Dobry Dr
- Utica Road  
Van Dyke Ave - M53
- Utica Road  
19 1/2 Mile Rd - Van Dyke Ave
- 17 Mile Road  
Mound Rd - Van Dyke Ave

2028

- 14 Mile Road  
Ryan Rd - Mound Rd
- 14 Mile Road  
Mound Rd - Van Dyke Ave
- 14 Mile Road  
Maple Lane Dr - Red Run Dr

2029

- 15 Mile Road  
Dequindre Rd - Ryan Rd
- 15 Mile Road  
Moravian Dr - Hayes Rd
- Metropolitan Parkway  
NE corner of Van Dyke Ave
- Moravian Drive  
Schoenherr Rd - 15 Mile Rd





# 5-YEAR SIDEWALK PLAN

	2025	2026	2027	2028	2029
<b>Sidewalk Replacement</b>	<b>\$2.25M</b>	<b>\$1.3M</b>	<b>\$1.3M</b>	<b>\$1M</b>	<b>\$1M</b>
<b>Sidewalk Gap Completion</b>	<b>\$390K</b> 14 Mile: Schoenherr - Hayes Dodge Park: 15 Mile - Metro	<b>\$1.25M</b> 18 1/2 Mile: Ryan - Mound Hayes: CCR - Utica/Park Utica: Hayes - 800' west	<b>\$1.2M</b> 18 Mile: West of Mound Ryan: 19 Mile - Dobry Utica: Van Dyke - M53 Utica: Van Dyke - 19 1/2 Mile 17 Mile: Mound - Van Dyke	<b>\$450K</b> 14 Mile: Ryan - Mound 14 Mile: Mound - Van Dyke 14 Mile: Maple Lane - Red Run	<b>\$750K</b> 15 Mile: Dequindre - Ryan 15 Mile: Moravian - Hayes Metro Parkway @ Van Dyke Moravian: Schoenherr - 15 Mile
• Easement Aquisition	<b>\$360K</b> 18 1/2 Mile: Ryan - Mound Hayes: CCR - Utica/Park Utica: Hayes - 800' west	<b>\$25K</b> 18 Mile: West of Mound 17 Mile: Mound - Van Dyke	<b>\$300k</b> 14 Mile: Ryan - Mound 14 Mile: Mound - Van Dyke 14 Mile: Maple Lane - Red Run	<b>\$50K</b> Moravian: Schoenherr - Hayes	<b>\$0</b>
• Feasibility Study	<b>\$50K</b> 14 Mile: West of Maple Lane 17 Mile: Mound - Van Dyke 18 1/2 Mile: Mound - Van Dyke Utica: Van Dyke - M53	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Annual Cost</b>	<b>\$3.6M</b>	<b>\$2.6M</b>	<b>\$2.5M</b>	<b>\$1.5M</b>	<b>\$1.75M</b>



# NATURE PRESERVE TRAIL

## Preliminary Route Layout

Red Dash =  
Conceptual Route\*

Black Solid =  
Existing Section

\*Final Route will be  
based on  
engineering survey



# NATURE PRESERVE TRAIL



# NATURE PRESERVE TRAIL

NATURE PRESERVE TRASH





# NATURE PRESERVE TRAIL

FIELD TRIPS AND  
INTERPRETIVE WALKS

## Anticipated Timeline

Design and Engineering-  
FY 2026/27

Construction to Begin- Fall 2027

Tentative Grand Opening-  
Fall 2028

**NATURE  
PRESERVE  
TRAIL**

# PICKLEBALL COMPLEX

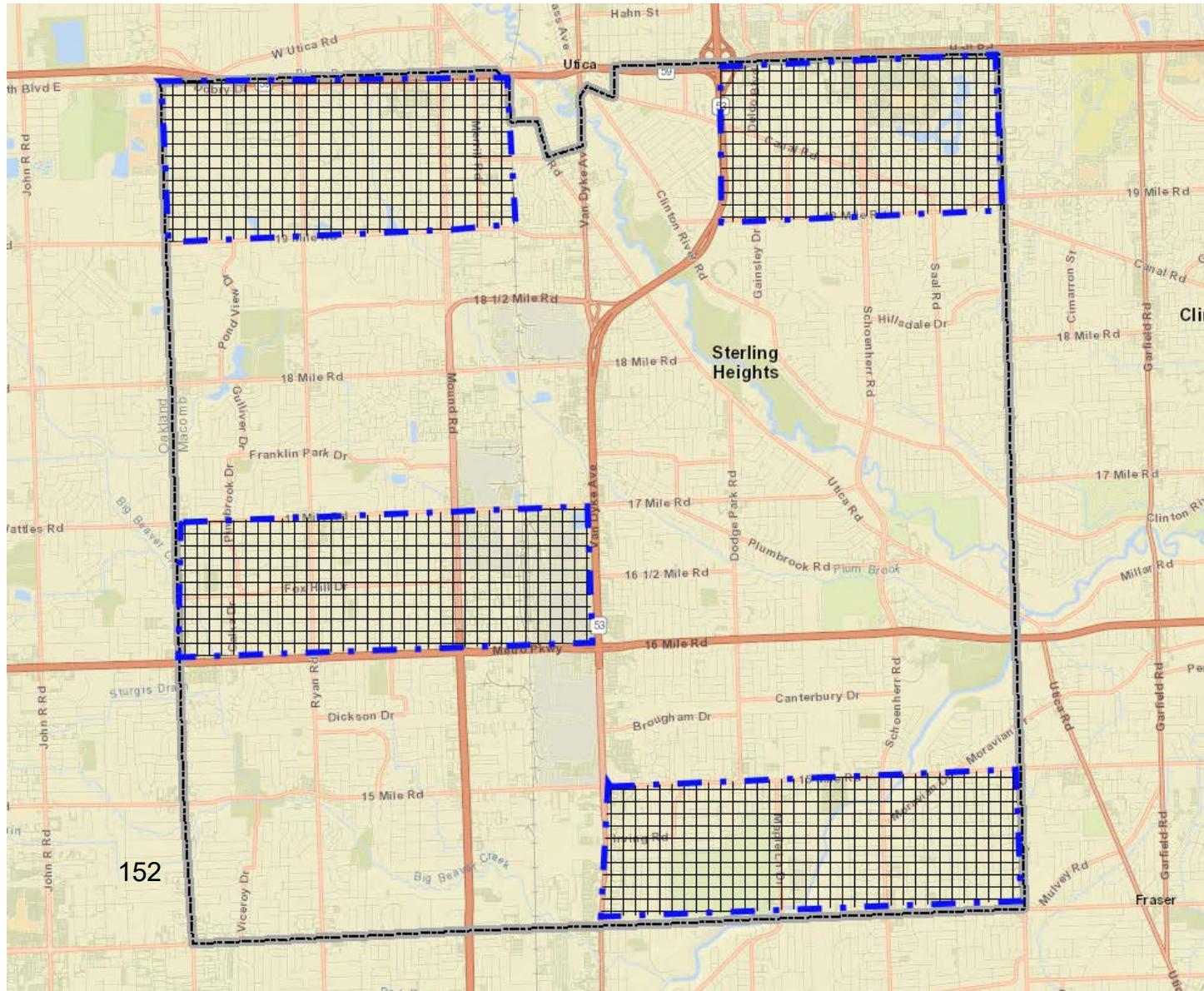


## Property Search Criteria

1. Property Location- Away from City Center

# PICKLEBALL COMPLEX

# Priority Areas for Land/ Building Purchase



# PICKLEBALL COMPLEX



## Property Search Criteria

1. Property Location- Away from City Center
2. Property Type- Parcel with existing building preferred
3. Building Size- 35,000+ sf

# PICKLEBALL COMPLEX



# PICKLEBALL COMPLEX



## Anticipated Timeline

Feasibility Study and Preliminary  
Concept Design- FY 2024/25

Property Purchase, Final Design,  
Bidding- FY 2025/26

Construction to Begin- FY 2026/27

Tentative Grand  
Opening- June 2027

# PICKLEBALL COMPLEX



# REIMAGINING ROTARY PARK

# Previous and Pending Purchases

- **Grant Approved for Purchase in 2025**
- **Purchased in 2024**



# REIMAGINING ROTARY PARK



# REIMAGINING ROTARY PARK



## Anticipated Timeline

Design, Engineering, Bidding-  
Calendar Year 2025

Construction to Begin-  
Spring 2026

Tentative Grand Opening-  
Spring 2027

# REIMAGINING ROTARY PARK

# CREATING RED RUN PARK

160





# CREATING RED RUN PARK

## Anticipated Timeline

Design and Engineering-  
Currently Underway

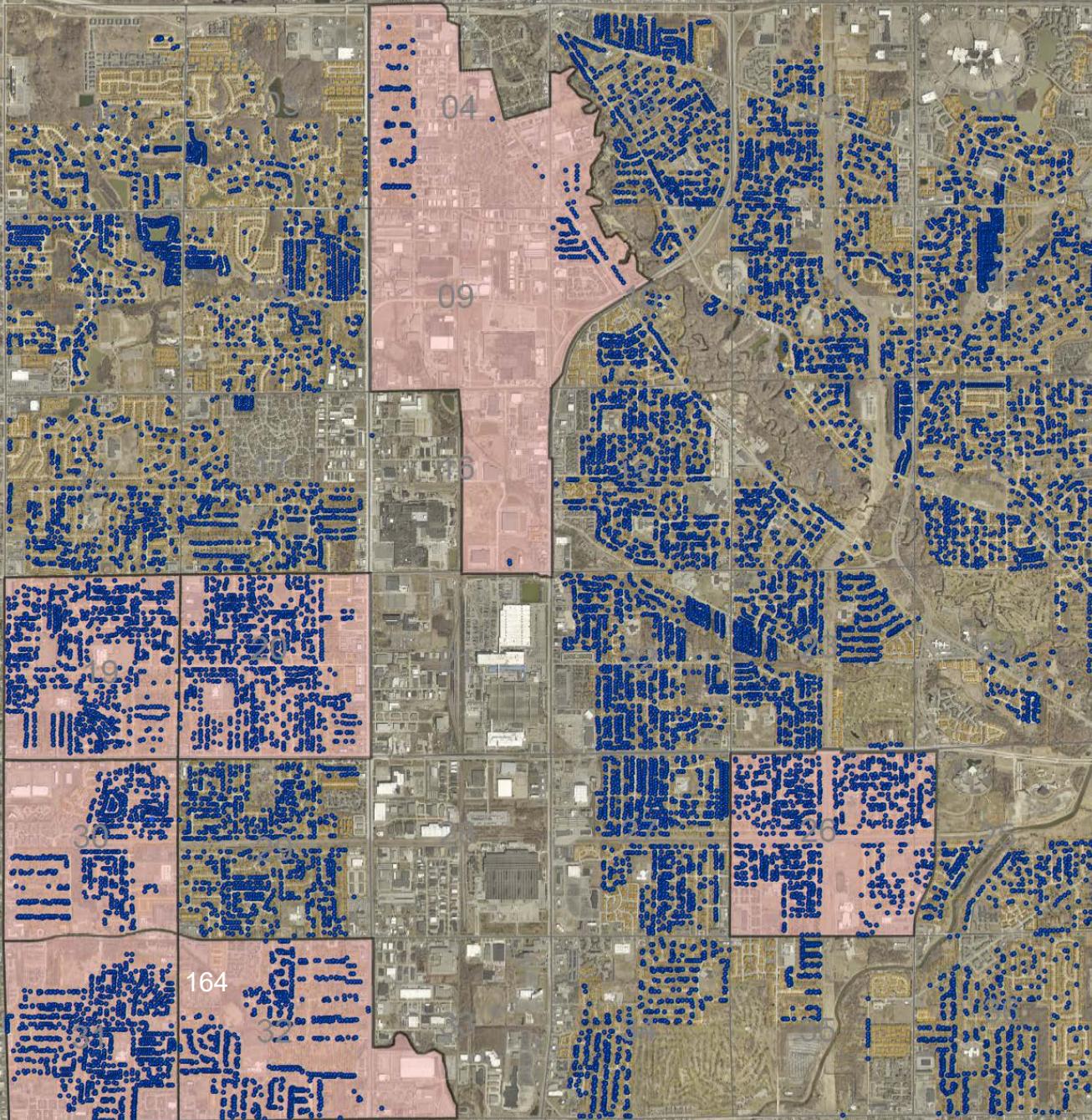
Construction to Begin- Spring 2026

Tentative Grand Opening-  
Spring 2027

# CREATING RED RUN PARK



# REFORESTATION



# REFORESTATION EFFORTS

- 2024:
  - 1,200 trees were planted along right-of-ways and in our city parks
  - Utilized \$24,000 in grant funding
- 2025:
  - 3,400 trees planned to be planted
  - Utilizing \$1,000,000 in grant funding
- 2026:
  - 1,600 trees planned to be planted
  - Utilizing \$600,000 in PPP funding



# BENEFITS OF STREET TREES

## Economic

- Reduce heating and cooling costs
- Increase property values

## Environmental

- Improve air quality by capturing and removing CO<sub>2</sub>
- Reduce urban heat island effect
- Reduce stormwater runoff & improve groundwater quality
- Provide wildlife habitat

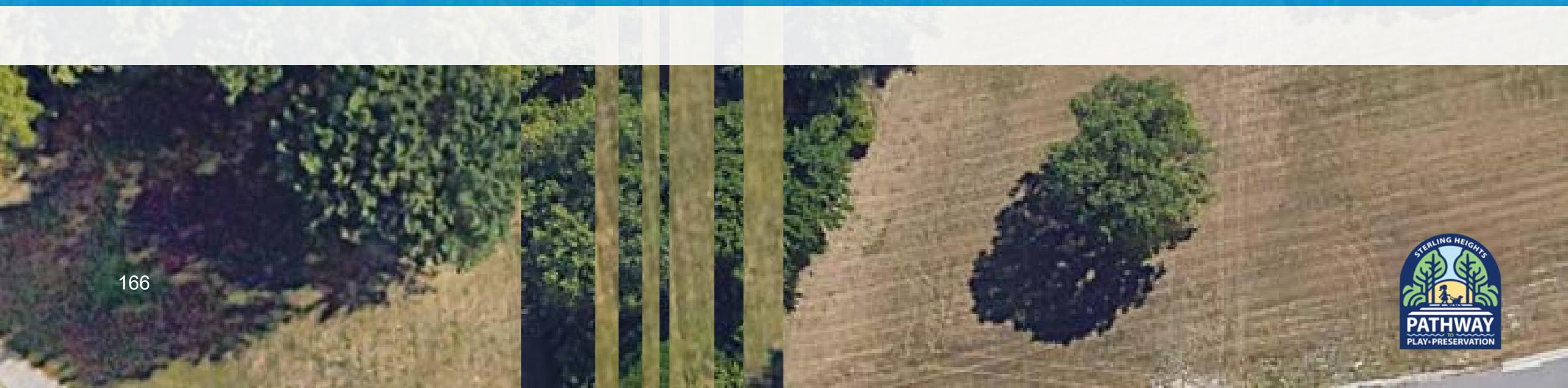
## Social

- Slow neighborhood traffic
- Promote public health & wellbeing





# OPEN SPACE PRESERVATION



166

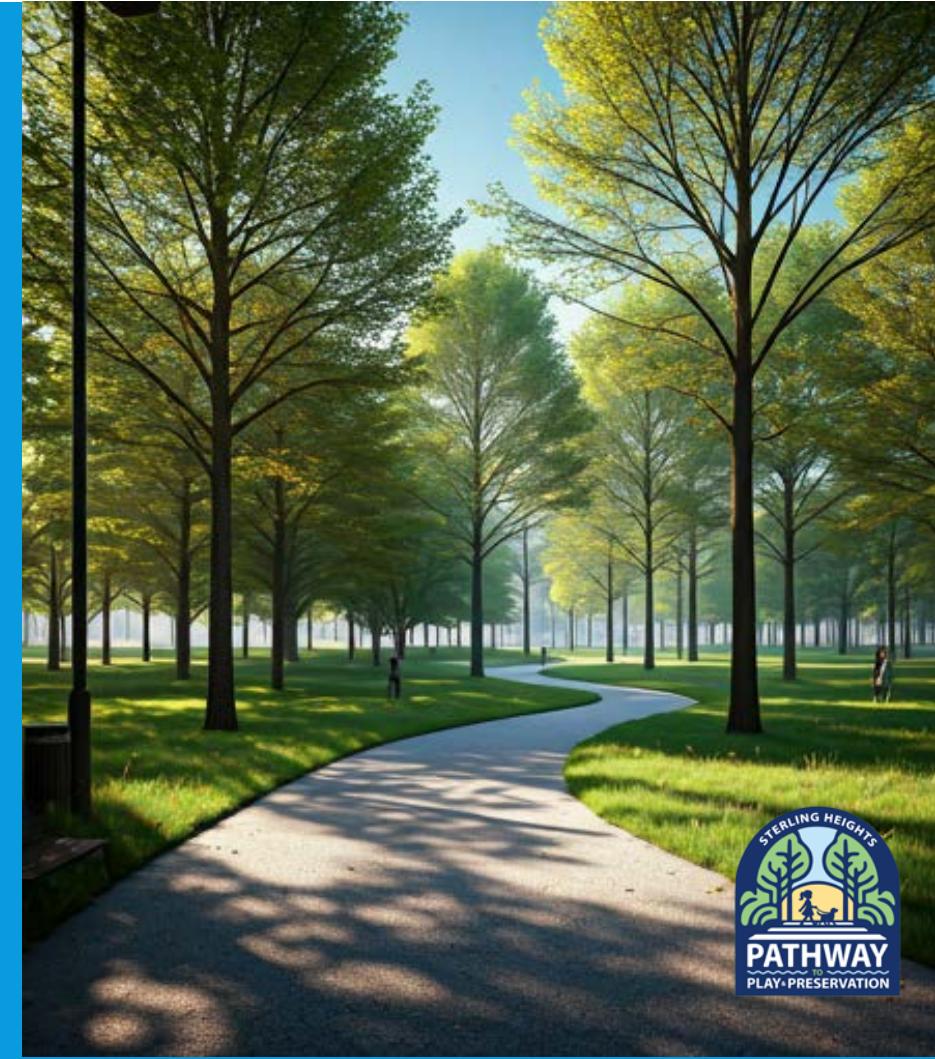


# PRESERVATION BENEFITS

- ❖ Improved Air and Water Quality
- ❖ Flood Control
- ❖ Groundwater Recharge
- ❖ Limits Development Density
- ❖ Improved Quality of Life
- ❖ Property Value Appreciation

Open Space preservation provides for a healthier environment and thriving communities.

*~2040 Visioning~*  
**Sustainability:** A city that is exceptionally maintained, sustainable, and environmentally responsible.

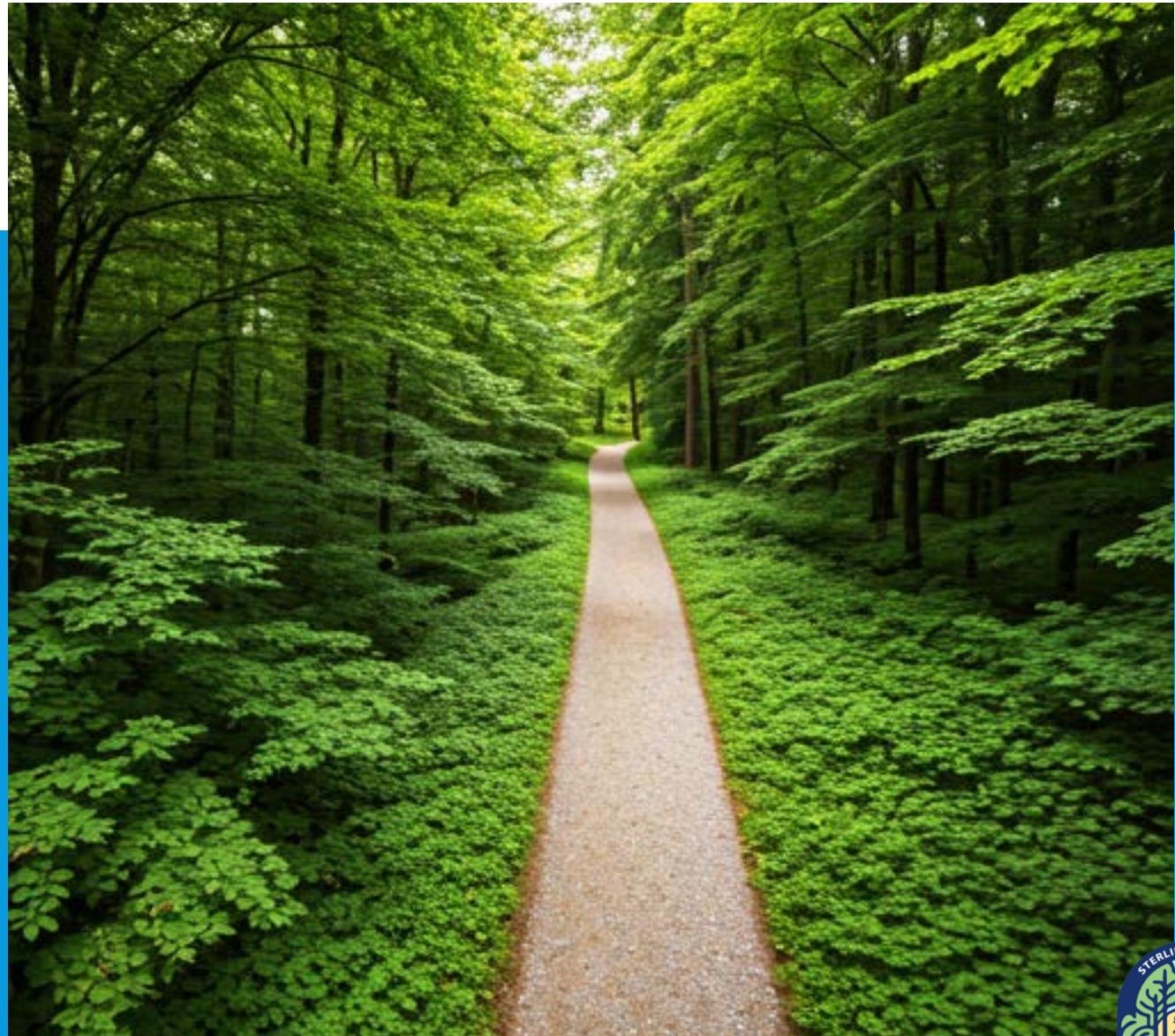


# OPEN SPACE EVALUATION

- ❖ Geographically Diverse
- ❖ Unutilized / Blighted
- ❖ Ecological Importance
- ❖ Benefit / Cost

## ~ 2040 Visioning ~

**Enriched Living:** Educational and recreational opportunities and programming for all ages, abilities and interests



# PUBLIC ENGAGEMENT



**In-person:** Community Meetings, Workshops, or Tabling Events



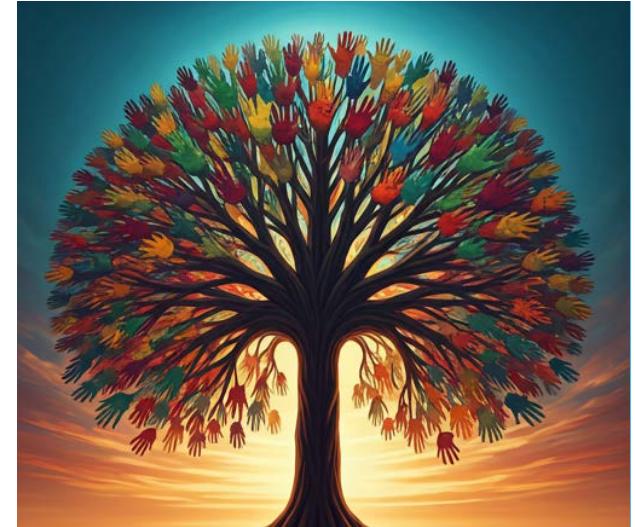
**Online:** Website, Social Media, Email



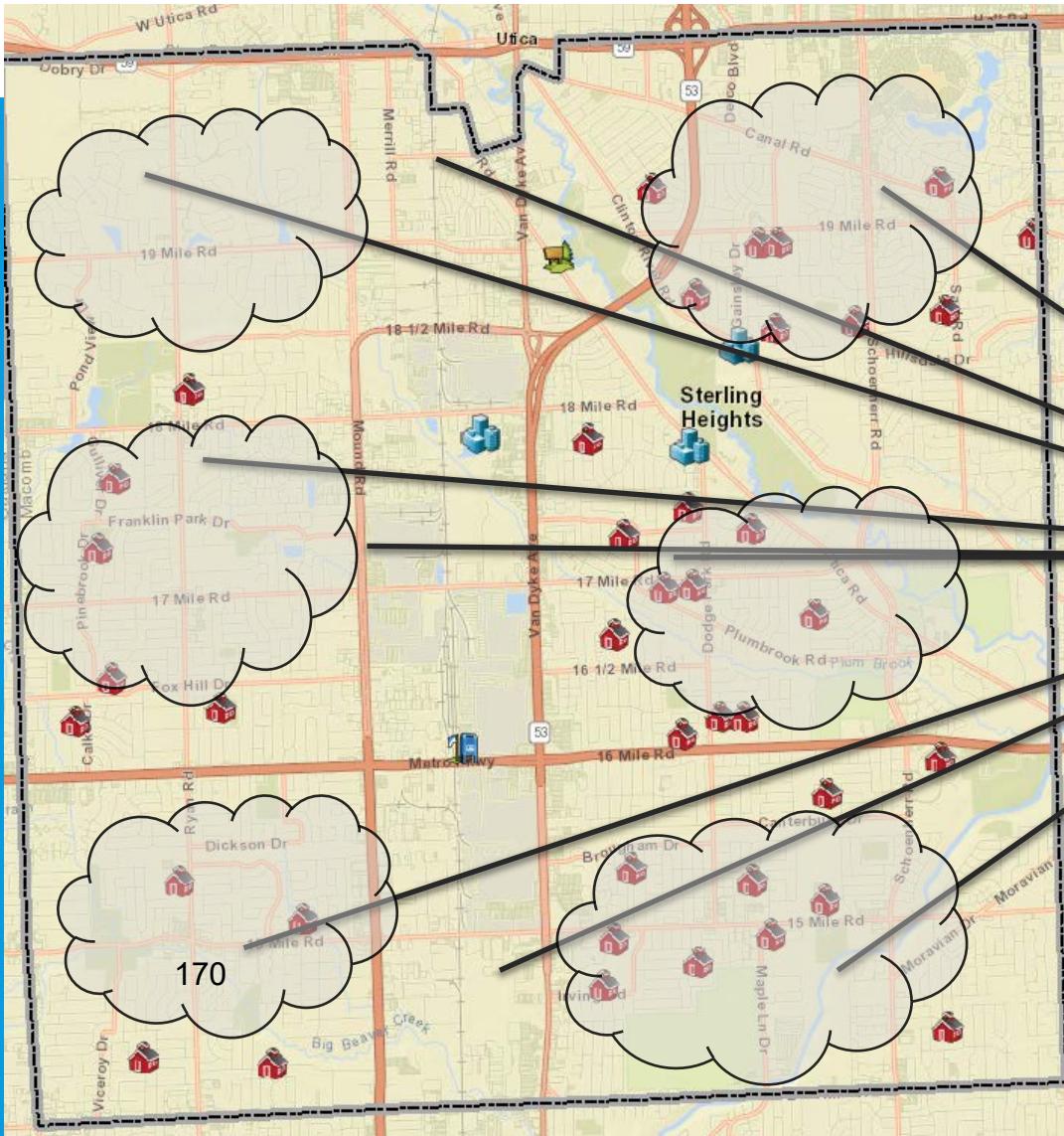
**Communication Material:** City Magazine, Flyers, Survey



**Audience:** Entire Community, Residents, Businesses, Places of Worship, City Council, Etc.



# OPEN SPACE PRESERVATION MAP



# PRELIMINARY PROJECT FINANCING PLAN



<b>Nature Preserve Trail</b>	<b>\$3,000,000</b>
Sidewalk Repair Gap/Program	10,000,000
Pickleball Complex	10,000,000
Rotary Park	7,500,000
Red Run Park	4,000,000
Open Space Preservation	5,000,000
<b>Total Estimated Borrowing</b>	<b>\$39,500,000</b>

## BONDED PROJECTS

<b>Bond Payment</b>	<b>\$3,600,000</b>
Sidewalk Repair/Gap (Year 6 – 15)	1,000,000
Satellite Library (Year 1)	300,000
Reforestation (Year 1 – 7)	600,000
Open Space Preservation (Year 5 – 15)	1,000,000
Annual Operations	750,000

## ANNUAL EXPENDITURES

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